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**FROM THE  
UNITED STATES GOVERNMENT**

















**REPORTS OF THE  
DEPARTMENT OF THE INTERIOR**

**FOR THE FISCAL YEAR ENDED JUNE 30**

**1918**



**VOLUME II  
INDIAN AFFAIRS  
TERRITORIES**



**WASHINGTON : GOVERNMENT PRINTING OFFICE : 1919**

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**July 15, 1919.**  
**From**  
**United States Government.**

**REPORTS OF THE DEPARTMENT OF THE INTERIOR.**

**Administrative reports, in 2 volumes.**

**Vol. I. Secretary of the Interior.**

**Bureaus, except Office of Indian Affairs.**

**Eleemosynary institutions.**

**Vol. II. Indian Affairs.**

**Territories.**

**II**



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**REPORT OF THE COMMISSIONER OF  
INDIAN AFFAIRS**

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# REPORT OF THE COMMISSIONER OF INDIAN AFFAIRS.

DEPARTMENT OF THE INTERIOR,  
OFFICE OF INDIAN AFFAIRS,  
*Washington, D. C., September 30, 1918.*

SIR: I have the honor to submit this, the eighty-seventh, annual report of the Bureau of Indian Affairs, for the fiscal year ended June 30, 1918.

## THE INDIAN'S WAR ACTIVITIES.

During the last fiscal year the affairs of the Indian Bureau have been interwoven with the problems of the war and its grave pending issues. We have done nothing without considering its relation to this overshadowing situation. We have released from the Indian Service, for transfer to more direct war duty, every employee who could reasonably be spared, observing the principle that no man who can be replaced is indispensable. We have endeavored to give the Indians a clear understanding of their relation to the war and their part in its prosecution, whether at home or abroad, and have seen them fall in line with marked intelligence and inspiring patriotism for service in every kind of activity to which the white man responds.

They have signally honored themselves and their country by entering some branch of the Army or Navy; by offering their money in war loans to the Government; by increasing the product of the country's foodstuffs and complying with the public food regulations; by swelling the ranks of wage earners in periods of labor depletion; by generous and eager contributions in money and service to every phase of organized relief.

AS TO SEPARATE INDIAN ORGANIZATIONS.—Early in the period covered by this report, I dissented from proposed encouragement of separate units of Indian soldiers in the Army as not in harmony with our plan for developing the Indian's citizenship and said:

We want to make him a vital part of our national life and have him feel that he is, but I doubt if that thought can be properly upheld by encouraging a racial recognition in defense of a common cause. It is increasingly apparent that our American civilization is to have a profound influence upon European conditions. It may yet be the leading power to rescue some of the Old World peoples from medievalism. If so, we must retain in its definition larger than anything else, the word "Unity."

I want the Indian to go into this conflict as the equal and comrade of every man who assails autocracy and ancient might, and to come home with a new light in his face and a clearer conception of the democracy in which he may participate and prosper. I



feel, therefore, that his logical and inevitable place is shoulder to shoulder with the white man, that his rights and duties are there, and that our obligations are due him in that relation to the end that he shall receive under like discipline the same respect and consideration given to other soldiers. I think we should give special care to the maintenance of this military relation and see to it that the young Indian soldier feels no discrimination. I think the best military status for the Indian is with the organizations of white soldiers, where under the usual Army discipline the benefits are measurably reciprocal, with a definite educational advantage to the Indian. The military segregation of the Indian is altogether objectionable. It does not afford the associational contact he needs and is unfavorable to his preparation for citizenship.

My personal observation when visiting cantonments and reports to me show that the Indians are making remarkably good soldiers, and I am gratified to learn that they are placed without regard to the fact that they are Indians. This mingling of the Indian with the white soldier ought to have, as I believe it will, large influence in moving him away from tribal relations and toward civilization.

From the standpoint here suggestively stated, to which other reasons might be added, I regard it as inadvisable to call a council for the purpose of arousing sentiment by agitational appeals to the Indians in the direction of separate military units, but that on all reservations and at Indian schools on and off reservations throughout the service and among Indians everywhere, the spirit of patriotism and loyalty should be taught and emphasized, and that all Indians acceptable under military regulations should be encouraged to enlist in some organization of the regular establishment.

**REGISTRATION.**—The registration arranged for June 5, 1918, of Indians who became 21 years of age since June 5, 1917, was conducted as that of the preceding year by cooperation of the superintendents with the State authorities, which proved to be the most expeditious and least expensive, and was acceptable to the Provost Marshal General, as expressed in the following paragraph from his letter to me of May 2, 1918, outlining the necessary preliminaries:

The rules for conducting the registration of Indians are not to be inflexible, and much will be left to your discretion and judgment. Remembering the effective manner in which your organization conducted the registration last June, it is the disposition of this office to leave the details of the forthcoming registration entirely in your hands.

The registration of the Indians has been generally very successful, notwithstanding the currency of one or two news items to the contrary, which may never be fully overtaken by corrected reports. There has been practically no resistance, except through misunderstanding, and no conditions have arisen obstructive to the intent of the conscription act.

Considerable uncertainty arose in connection with the first registration as to what constitutes Indian citizenship, and while, usually, the question of citizenship is an individual one involving a consideration of the facts in each case, the situation was later much clarified by furnishing superintendents with the following general rules for use in doubtful cases:

I. Indians whose trust or restrictive fee patents are dated prior to May 8, 1906, are citizens by virtue of section 6 of the act of February 8, 1887 (24 Stat. L., 388).

II. Indians whose trust or restrictive fee patents are dated May 8, 1906, or subsequent thereto and who have received patents in fee for their allotments are citizens by virtue of said section 6 of the act of February 8, 1887, as amended by the act of May 8, 1906 (34 Stat. L., 182).

III. Section 6 of the act of February 8, 1887, both before and after its being amended by the act of May 8, 1906, provided that:

"Every Indian born within the territorial limits of the United States who has voluntarily taken up, within said limits, his residence separate and apart from any tribe of Indians therein, and has adopted the habits of civilized life, is hereby declared to be a citizen of the United States, and is entitled to all the rights, privileges, and immunities of such citizens \* \* \*."

IV. The solicitor of this department has held that where Indian parents become citizens upon allotment their minor children became citizens with them, and that children born subsequent thereto were born to citizenship.

**ARMY AND NAVY ACCESSIONS.**—In my last annual report I could not give with much certainty the number of Indians in war service. Later a systematic effort was made to procure reliable data as to the number enrolled for active duty by enlistment and draft, which is still incomplete, but sufficient for a close approximation, and justifies an estimate of 8,000 Indians now in training or actually in some branch of the Army and Navy. Of this number approximately 6,500 are in the Army, 1,000 in the Navy, and 500 in other military work. It is also significant that fully 6,000 of these entered by enlistment. Moreover, it should go into the record that many Indians from our northern reservations enrolled in Canadian military organizations before the declaration of war by the United States. I am perfecting as rapidly as possible this roster, the work of which has brought me into intimate touch with many of our Indian soldiers whose letters from cantonments or abroad are full of interest and in unpretentious language sound a note of steadfast courage, optimism, and a broadened view of the great events in which they mingle. Letters reaching me from abroad show that the Indians, some of them from "blanket" tribes, are acquiring a better use of English, and even learning French. They also note the methods of foreign agriculture and the intensive economies of peasant life, and are thus students of conditions more or less applicable to their own occupations. Considering the large number of old and infirm Indians and others not acceptable under the draft, leaving about 33,000 of military eligibility, I regard their representation of 8,000 in camp and actual warfare as furnishing a ratio to population unsurpassed, if equaled, by any other race or nation. I am very proud of their part in this war. They have placed themselves in a concrete and vital relation to the Government under whose protection they live and in the administration of which they are destined to participate, and have entered a school of rugged experience that can not fail to fit them more thoroughly for the service and the competition of civil life. The day

is not beyond my vision when the brain and soul of him whose ancestors dwelt in this land before the white man dreamed of its existence shall find illustrious expression in the order and liberty and power of our national greatness.

I reluctantly withhold a detailed account of the many instances of tribal and personal patriotism and of individual valor and achievement by our Indian soldiers in the service of both Canada and the United States that came to my attention during the year, for no record here would seem fittingly impartial that did not include the hundreds of noteworthy and authenticated incidents on the reservation, in the camps, and in France that have been almost daily recounted in the public prints. The complete story would be a voluminous narration of scenes, episodes, eloquent appeal, stirring action, and glorious sacrifice that might better be written into a deathless epic by some master poet born out of the heroic travail of a world-embattled era.

**LIBERTY BONDS.**—Hardly less important than the man with a gun is the man with a bond. The Indians on the reservations ineligible for enlistment or draft were prompt to see the Government's financial needs in all the operations of warfare. Last year I reported that their subscriptions to the first issue of liberty bonds amounted to \$4,607,850. Subscriptions to the second issue were \$4,392,750, and to the third issue \$4,362,300. They are only such results as are known to the various field superintendencies and reported by them. However, I have enough reliable information from numerous sources to show that many subscriptions were made through banking channels in localities where the Indians quite generally have acquired citizenship or have no fiscal relation with a reservation, official report of which did not reach this bureau, and I am sure that a conservative estimate of such additions to the list would raise the grand total to \$15,000,000, or a per capita subscription of approximately \$50. It is true that the moneys thus invested were largely individual trust funds drawing a rate of interest less or not exceeding, the rate of the bond, but the subscriptions were in accordance with the wishes of the Indians and were a true index of their sentiment. The equivalent of a \$50 liberty bond for every man, woman, and child of the Indian race in the United States at the close of our first year in the war needs little comment. It speaks for itself. It writes itself indelibly into American history and into the annals of all progress; it is an expression of patriotic allegiance to the right side of a contest involving the fate of humanity, as extraordinary as it is gratifying.

In all these transactions I have been amazed by the wonderful and spontaneous fidelity of the Indian to the highest welfare of the Nation, as well as his ready appreciation of a desirable investment.

The promise of thrift and the saving habit as a coordinate feature of his response to our present colossal needs is a most encouraging evidence of growth toward the principle of self-support, so essential to his stability and progress as a citizen. I have had occasion to say that man has no stronger element, when properly developed, than the disposition to acquire property, own a home, and be a substantial factor in society, and I hail this growing manifestation in Indian life as a sure basis for the strong and trustworthy citizenship to which our efforts are directed.

**RED CROSS WORK.**—The cooperation of the Indians, young and old, with the Red Cross and other agencies for war relief developed during the year into a most important factor of philanthropy. In many instances the Indians inaugurated with but little outside assistance, lively campaigns for funds through social gatherings, auction sales of contributions, and various community activities.

The reports coming from the different Indian schools and field workers show little more than a fragment of the relief work done by the Indians, for the reason that large numbers in localities near towns and white communities affiliated with local chapters in gifts of both money and service, of which only estimates are at hand, but it is known that on many reservations practically every adult subscribed a Red Cross membership fee or more. The actual data received justifies a report, in round numbers, of 10,000 Indian Red Cross memberships, 100,000 hospital garments, knitted, and miscellaneous supplies. Some 500 Christmas boxes were sent from the boarding schools, where the students are very proud of their soldier representatives. The larger schools collected "Students' Friendship War Funds" aggregating thousands of dollars, and in many cases coordinated their relief activities with the vocational outlines of the course of study.

Although it would be gratifying to swell the above estimates, as assuredly could be done, with complete data, I am content with the prevailing situation which arises from the fact that the Indians are largely mingling their efforts with the whites and are glad to do their work for the great good it accomplishes rather than from a spirit of racial emulation. There is thus the same union of purpose, opportunity, and service in the doing of great and unselfish things that prevails in the fighting ranks and that knits together all our higher interests as Americans.

The limits of this report could be easily filled with matters of relevant interest. A few incidents only are given.

The championship in knitting has been generally conceded to Mrs. Sarah Valandre, an Indian of a South Dakota reservation, who began a soldier's sweater at 2 p. m. and completed the garment, which was an excellent piece of work, at 10.30 the same evening.

The Indians often write letters to the superintendent, accompanying their donations. One of them begins: "I inclose here \$5 to the American Red Cross, the great organization of mercy whose activities know no bound in territory, no limit in service."

A superintendent in Utah reports 511 subscribing members among the Ute Indians, with total subscriptions of \$4,980. At a public gathering on this jurisdiction, among the scores who lifted hands as contributors, was an old woman of 75 years who spread all fingers of one hand. The superintendent, understanding that one finger meant a sign to give \$10, recorded her for \$50. A few days later, when she limped to the agency to fill out her Red Cross card, she was indignant at the amount and explained through an interpreter that she meant \$500. "But," said the superintendent, "you have only \$513 to your credit." Quickly came the answer, "\$13 left? That's enough for me." Another superintendent reports: "Three Indians have each contributed a steer which sold for \$70, a total of \$210, to the Red Cross."

On a small reservation far north, where the winters are long and severe and the Indian must struggle for the necessities of life, more than \$1 per capita for every adult was paid in cash for the Red Cross and other war-relief purposes. In the far Southwest, where the parched desert gives scant returns and sheep raising is the chief means of support, many of the Indians have each promised a fleece of wool for the Red Cross, and the superintendent plans the spinning of this wool and knitting it into socks, sweaters, etc., by the Indian women. In a Montana district, where the Indians are nearly all fullbloods, they voluntarily held meetings and each one who had a growing wheat crop promised to donate one sack of wheat for war-relief work. On another reservation where the Indians are very poor and have little ready money they donated an abundance of handsome bead work and other curios to be sold for the Red Cross.

One of the smaller schools in Oklahoma reports:

Our school has affiliated with the county chapter of the Junior Red Cross and has a working organization of 176 members, being the total enrollment of the school. Wednesday evening of each week and such other time as can be spared is devoted to making Red Cross supplies.

The lady superintendent of one of the boarding schools for girls of the Five Civilized Tribes in Oklahoma on her request was authorized to introduce Red Cross work as a regular feature of domestic-science training and has accomplished splendid results. From her full report the following is gleaned:

Our girls are deeply interested in all war work and respond so readily to our requests for additional garments. Several supervised periods are given the girls each week to insure a certain output of knitted articles. Then the interest is kept up by means of parties held by the various teachers, and at which time Hooverized refreshments play an important part.

The very small girls knit up the scraps of yarn into refugee caps, afghan squares, etc. Also they utilize the scraps from the hospital garments making quilt blocks. Larger scraps are used for small undershirts for the refugees. The lesson in thrift in this one feature is invaluable to us. Gun wipers have been cut by the hundred. Prizes have been offered for activities to stimulate interest.

Small Red Cross dolls have been made and sold for our fund. These the children enjoyed making and selling. Each month children write letters to their guardians, in which they send report cards. They ask earnestly that money be sent to them that they may take part in this great war. Their letters show their enthusiasm and patriotism.

We are reading "Red Cross Stories," and our children will all leave us with a good general knowledge of how the Red Cross began, its struggle and success. This line of thought is kept before our girls and teachers continually and if in no other way than by absorption, they will surely get the spirit of and necessity for this war work.

We are not willing for our girls to go back home and sit with folded hands all summer, so the plan of giving personal letters of introduction to girls efficient with the needle to be handed the heads of Red Cross chapters in their community will be carried out.

Regular flag salutes are given on the campus and in the dining room. The Red Cross has strengthened our heads, hearts, and hands, and has brought to us just the lesson we have so badly needed—the lesson of service and thrift.

An interesting account comes from a northern Minnesota reservation, where it is believed the first Indian Red Cross auxiliary was started in the spring of 1917, in the course of which the president of the auxiliary says:

There was no spectacular coming of hundreds of Indians to unite in the then almost unknown work of the Red Cross. One Indian woman was present at the first meeting and has since been most faithful in her efforts. Week after week the little band of women met and carried on the work assigned them. Week after week the cautious Indian women came and took part in the work, until at the end of nine months three-fourths of the members are Indians. The auxiliary numbers 48, and this from a community of less than a hundred adults. Some of these women have walked to the weekly meeting place across the ice from Old Agency when the temperature was 20° below zero. They have sewed on hospital shirts and socks and learned to knit the various garments just as their white sisters of the cities have done. The most remarkable and encouraging part of the Indian work is that it has been one of increasing personal interest and continued activity.

One evening recently an Indian and his wife, living 17 miles away, came to the home of the treasurer and inquired about the work being done, the woman bringing her dollar for membership, saying, "I want to do something for my country."

I can not refrain from this reference to the interest of the Indians in Red Cross work, although it can give little more than an intimation of their wide-spread and open-hearted response to the sacred appeal which more than anything else tells the difference between the civilization of a free people and the barbaric cruelties of autocracy. Among the compensations coming to the Indian from the war is the one he has already accepted, viz, that the great principles and ideals that are worthy of a trained warrior's daring are one with the divine impulse to do good and help others; that the cool bravery of his son in the trench and the gentle ministry of his daughter in a Red Cross hospital are the sublime coordination of human service to the highest end.

**FOUR-MINUTE SERVICE.**—Early in February, 1918, I issued instructions to all superintendents to participate so far as possible as four-minute men in the campaign for the sale of war savings certificates, furnishing them with appropriate bulletins and literature. This was done in cooperation with the Committee on Public Information whose representatives found it difficult to reach many of our reservations and schools situated some distance from the towns where they were scheduled to speak. The plan was generally successful and developed much interest among the Indians, both adults and the children in the schools, and the sale of war savings stamps grew into large proportions among those of limited means. Stamps were in many instances purchased from individual and unrestricted funds representing the actual earnings of the purchasers who thus evinced a special inclination to save and acquire an interest-bearing investment. They were usually purchased through the postmaster, or other agency provided for their sale, and held by the Indians themselves. It is not practicable to submit a definite report of these sales, but returns from the field service generally show a widespread and growing demand for "baby bonds," and a feeling that their purchase is a patriotic "bit" within the reach of all.

**COOPERATIVE AGRICULTURE.**—It was our purpose throughout the year to place all agricultural and industrial pursuits of the Indians upon a war-winning basis, and in correspondence with superintendents upon spring farming operations for 1918, I said in part:

I assume that you have already done much preliminary work among the Indians for the coming planting season, and feel sure that you will join me in the purpose to make last year's campaign for increased production on Indian land only the beginning of a much more successful one this year. The results of the previous year were very gratifying, but the demands upon us have increased. The industrial welfare of the Indian is itself a perpetual call to improve upon each preceding year; not by attempting too much, but by handling intelligently and intensively as much land as means and equipment will justify. I urge you to impress upon the Indians that anything less than this is not successful farming. Keep it before them as convincingly as you can that the farmer or stock grower who does well is always trying to do a little better.

Again, our international demands promise to be much more extraordinary than hitherto. Our soldiers are going to the front. They, with the armies and all the people of our allies, must be fed. Our fields are not overrun and laid waste by the enemy. The yielding capacity of our acres should be larger than ever. The troops we send abroad increase rather than lessen our obligations to produce subsistence for export. We are this year confronted by a more exacting emergency than ever before and every productive energy should respond to the utmost. The loyalty of the Indians has called forth the strongest praise everywhere. Thousands of them have entered active military service. I can not doubt that those on the reservations are equally patriotic and will give full proof of it by making every unused acre of land a war-winning factor in addition to supplying food and forage for home supply. Agriculture, industry, labor everywhere must lift this year every ounce that it can carry, not only for the actual and physical needs of the present, but for ideals and principles

sacred and essential in our national life, and the Indians must and will gladly do their part.

Therefore, I urge with increased emphasis that your season's campaign be well and aggressively organized. I need hardly add to your experience the suggestion for an unfaltering follow-up plan of work and supervision, the pivotal features of which will, of course, consist (1) in getting the employees and Indians to see the situation as it is, and in arousing their responsibility as faithful promoters of their own interests and as patriotic Americans willing to match at home the loyal zeal and purpose of those on the sea or battle fields of Europe, and (2) by leaving nothing practicable undone in providing the necessary means and equipment, such as seeds, implements, and other supplies, for accomplishing the desired result.

Notwithstanding the war loss to our Service of many valuable farmers and stockmen, causing a shortage of supervision still unsupplied, there was last year a large increase of acreage cultivated by the Indians, often doubling that of the preceding year. Many also made a beginning in a small way, producing enough for their own needs and a little more. Many others exchanged their wandering habits for more settled farming purposes. A quickened impulse for home building appeared on many reservations. Greater preparation than ever was made for exhibits at Indian and State fairs and interest in the canning and preservation of vegetables greatly increased. The Indians became conspicuously more interested in the better methods of stock growing, the improvement of breeds, proper pasturage, winter feeding, and protection, and adequate water supply. Many of them are the rivals of the most successful white stock growers. Although handicapped in some sections by severe drought, the Indians last year responded with splendid interest and unprecedented results that show not only a steady progress but motives of aroused patriotism and a comprehension of the supreme war demands upon all our productive resources.

**THE LABOR SITUATION.**—In order to cooperate to the fullest extent with the aims and efforts under Federal direction for providing adequate labor for all lines of productive employment, I brought the matter to the attention of all reservation superintendents early in April, and said, in part:

Sufficient labor for all our productive and industrial demands is an instant and growing need. The casual reader knows how all belligerent nations abroad have been caught in the clutch of the labor problem; how their women and children, their old folks and cripples have had to help farm the fields and work in factories; how adjacent neutral countries are pinched by the scarcity of toilers in domestic activities. We are now facing a similar situation, and the causes are clear without graphic description. We must fill the places of our sturdy fellows who are in the trenches or on their way there. We must increase immensely our normal products for food and clothing to satisfy export demands, besides creating extraordinary supplies for actual warfare. These things are obvious without statistics. We face a labor shortage in certain areas and occupations and we should drive a wedge of workers into that condition wherever it is found. The Indian Service must help do this as far as possible.



As should be expected, agriculture will feel first and most the shrinkage in labor, for in addition to its contributions to the Army and Navy, many farm laborers are attracted to industrial centers by higher wages. Farming enterprises in various sections need Indian labor, and the Indians, if not profitably occupied with their own allotments or otherwise, need this employment. They need any employment that will associate them with the white man's operations in farming and live-stock interests or other successful vocations. They should also have every encouragement to respond from patriotic motives to the labor demands of the country.

It is very important that there be no idlers or intermittent workers among the able-bodied adult Indians this year when every ounce of productive energy is needed as a war-winning factor, and I feel assured that I can count on your prompt cooperation in this matter with a view of determining approximately the number of Indians on your reservation who can be spared for work in other localities and the probable number of such Indians who can be induced to accept employment at reasonable wages. In arriving at your estimates, I do not want you to overlook the importance of our duty to induce the Indian to cultivate his own land, engage in the raising of stock, or in some other productive occupation.

Having in mind that at most of the nonreservation schools, a number of which give the advanced courses in vocational training, there are considerable numbers of students sufficiently mature to perform manual labor, I addressed the superintendents of these jurisdictions as follows:

I have recently requested reservation superintendents to make special effort in the direction of having all surplus Indian labor employed as far as possible throughout the coming season of planting and harvesting, and desire your earnest cooperation with this plan to the extent of securing employment during the vacation period for your larger students who will not be needed at home or to assist in school activities.

All full-grown or nearly mature boys and girls, if in reasonable health, should be occupied all of their vacation in some capacity that will help produce and take care of the necessities of life. It is of crucial importance that no part of this year's harvest be neglected or wasted, and wherever help is needed in the fields or homes of farmers or gardeners Indian students competent for such work should be aided in securing it unless otherwise properly occupied. Please give this matter your careful thought and organize your efforts to the end that every young man or woman shall find a busy corner somewhere during the summer.

You can not too urgently impress upon all these intelligent young Indians their present patriotic obligation to join actively the ranks of workers whose toil is indispensable to our liberties.

I hope to hear that you will be able practically to aid and direct many of your pupils, particularly the older ones, into temporary employment that will be educational to them and helpful to the cause we must make victorious.

The past year shows a comparatively low percentage of unemployed able-bodied Indians. They answered the call for labor in something of the militant spirit that in these days has become essential to American activities, and wherever there was bridge or road work, lumbering or milling, fishing, planting and harvesting, irrigation construction, cotton or hop picking, orcharding, and vegetable gardening, or anything else that had to be done on a reservation, and often far from one, the Indian was generally in evidence with few words but with dextrous hands, patient endurance, and, what has been noticeable, with a dawning comprehension that American labor everywhere is a part of our

war force. I have learned of no suspicion that the Indian ever drove spikes in a saw log or threw a wrench into any industrial machinery. I believe he is under no indictment or sentence for sabotage.

The schools quite generally gave to Indian pupils the patriotic impulse to do their part. In many instances boys of 12 years and over signed pledge cards for summer work. The outing service of girls for domestic and boys for farm work with white families greatly increased, one school reporting 300 thus employed by the end of June. The larger boys going to the beet fields, fruit farms, and other summer occupations far exceeded former records. Older students of mechanical preferences have been successful in munition plants, and some 40 or 50 were placed in the Hog Island shipbuilding service. A letter from one of the large motor companies to our Supervisor of Employment closes as follows: "I wish to thank you at this time for the valuable assistance you have been to me, as all the boys are turning out to be first-class men and steady." "First-class men and steady" has the right ring. It tells the product we covet for our Indian schools. It answers well the Nation's need in times of stress and peril.

**PUBLIC FOOD REGULATIONS.**—In view of the extraordinary undertaking of the Federal Food Administration to handle and control the whole question of foodstuff supplies as related to our domestic and foreign demands, and to do it very largely by persuasion and appeal to the intelligent patriotism of the country, I beg to submit in full my Circular Letter, of April 13, 1918, in cooperation therewith.

**TO SUPERINTENDENTS:**

From the day the United States entered the war I have urged an increased production of foodstuffs at all Indian schools and on all reservations and have recently sought greater cooperation with the Federal Food and Fuel Administrations. I desire now to give even greater emphasis to the necessity for *saving* and the elimination of *waste*.

This year may not end the war; it may last much longer. In any event, there must go on persistent team work in intensive production and simplified consumption—the greatest yield and the utmost saving. Investigation has clearly shown that by a frugal, yet fully health-supporting use of foods, and a radical reduction of waste, we can maintain our national vigor in all lines of work and add enough to the home supplies of our allies to give them the energy they need for work and warfare. If we who remain, support with loyal efficiency the magnificent man-power going abroad, we will keep the world fit to live in. But we must get the feeling in every heart beat that the war is more than a distant danger; that the din of battle at our doors would not be more real and threatening.

Reliable estimates gave the supply of wheat in our country's mills and elevators on March 1 as 20,000,000 bushels less than one year previous and show that existing stocks of flour were much below 50 per cent of the normal quantity needed until July 1. The 90,000,000 bushels of wheat promised our allies between January 1 and July 1 is their minimum need, and we dare not curtail it. Some of the States have successfully substituted more than 50 per cent of other grains and vegetables for wheat, and the food scientists declare that the country generally can thrive on a fifty-fifty menu.

It is now well known that the consumption of our food staples, wheat and meat, can be reduced by using substitutes which are equally nourishing but not suitable for export, and the present emergency tells us that we must have "wheatless" and "meatless" days, if we expect to have warless days.

The Food Administration has given exhaustive study to the whole question of food supply and consumption as a war-winning proposition and, in cooperation with the Department of Agriculture, has put out in simple and complete form information for following a "saving schedule" in nearly everything we eat and yet keeping well and energetic on a properly balanced diet. It has issued a war cook book, pamphlets on war economy and food, and a number of valuable bulletins and leaflets covering in a practical manner the preparation and serving of the various substitutes for wheat and meat with special reference to maintaining the health of growing children and the working vigor of adults, including also timely lessons in the use of scraps and leftovers. The Administration has told the country things of incalculable worth in its eating and drinking, things as good for peace as for war. You will find in its publications the requisite instruction as to the kind and preparation of substitutes and their nutrient strength with the value and best food combinations of many kinds of grains and vegetables. Some of our Indian schools are reproducing this information in their publications, and more of them should do so. I am informed that each State college has an official designated to give war-food instruction and suggest that you avail yourself of this assistance wherever practicable.

I feel that the Indian Service should get into closer accord with this great movement authorized by law and strongly sanctioned by the President. With this circular will go to you samples of information for public guidance, and you are urged to cooperate with your State food administrator and secure such supplies and instructions as will bring effective results within your jurisdiction. The Administrator's suggestions should be followed in all school kitchens and dining rooms and at the mess tables of all employees so far as local conditions and the maintenance of health will permit.

The Food Administration is giving strict attention to health needs in its dietary régime, as a study of its prescribed munus with their nutritive properties will show. It is also furnishing lessons in war-time food problems suitable for high schools which should be of supplemental value to our vocational work in home economics. Some of our schools are now doing excellent work closely in line with the Administration's orders. Even in such little things as scrap savings from the tables, organized competitive work is eliminating waste and training the girls for practical "bits" in housekeeping.

This is to be the year for school war gardens the country over. Let us be in the front rank for all such work. This year we should plan and labor for not only the fullest bounty of the soil on every school farm and garden and every Indian's allotment, but we must care for the harvest with scrupulous diligence. Our canning, drying, and preservation of fruits and vegetables must have greater attention than ever. Our protection of crops and the feeding of stock must show the minimum of wastage. Every kitchen and root cellar, every silo and feed lot must be a war-winning auxiliary. We must make a working maxim of the fact that a weekly saving of a pound of bread for each person in the United States will increase our annual wheat exports a hundred million bushels. This is the year to translate every pulsation of patriotism into activity that produces and conserves.

It is quite as important to save as it is to produce; in fact waste involves loss of energy as well as expense. Conditions over which we have no control may prevent production, but waste is preventable and should not be permitted or tolerated; it is inexcusable. I am sure that much can be accomplished by farmers, field matrons, physicians, day-school teachers and all workers in practical contact with the home life and activities of the Indians. The Indians, young and old, have shown willing and marvelous support of our American ideals against the mad challenge of despotism

and they will under wise counsel respond to our plan for increased products and re-organized consumption. The very stress and tragedy of these days may be turned to their advantage by teaching them how to save, how to take care of the small things, how to value thrift, how to lay up for the future, how to be provident and happy in temperate and industrious living. The program thus far outlined by the Food Administration is not oppressive. It is rather educational toward sane and simplified living. We should get behind it with complete loyalty. Superintendents should see that traders comply with it. Where flour mills are in operation on reservations, superintendents should give careful attention to the output in order that the food policy of the Government may be fully supported.

In all this work it is well to remember the warning from eminent authorities that the American as a rule eats too much, that as a people we would be healthier, stronger, and more effective in accomplishment, if more frugal in our eating. We eat beyond our physical requirements and suffer corresponding injury.

Our system of purchasing supplies may, under contracts now closed, prevent complete adjustment of rations to the food regulations immediately, but for such supplies as can be carried over with entire safety, there should be made, wherever practicable, the substitutions recommended by the Food Administrator, and if funds are lacking for this compliance, you may for school purposes, draw on funds already hypothecated for salaries and other expenses, and the amount, or so much thereof as may be necessary, will be replaced from the emergency fund recently appropriated.

I desire you to give this matter your personal and prompt attention, and shall expect every employee under your jurisdiction to cooperate with you fully.

The general tenor of many responses by superintendents regarding compliance with the food regulations is indicated by the following extract:

The schools have been put on a fifty-fifty basis as to wheat products, and really a little more so. The pupils seem to enjoy the diet, and there is no question as to its wholesomeness. Waste is reduced to the minimum, and then what there is in way of unavoidable waste as to human consumption is fed to chickens and pigs, so that there is no ultimate waste, nor is there any thing left for the flies to lay eggs in.

A liberal use of food leaflets was made among the Indians who, in some localities, did not readily understand why they must purchase substitutes with certain supplies, but upon having the matter explained and finding that the same rule was applied to all white customers, they adjusted themselves to the situation and in many instances became champions of the Federal food policy.

**PHILOSOPHICAL PHASES.**—The war in its earlier stages was appalling in its proportions and bewildering in its possibilities. To-day we are getting its vast perspective. We are seeing ourselves in it, and glimpsing in its clearing vistas the destiny of many nations. Amidst unspeakable evil we are finding the good. From the blackness of error and falsity, white truth emerges. Moral and spiritual principles, old as eternity, have appeared because we have been searching for the good, the true, and the just. The war's necessities are creating its compensations. Many of its victories, perhaps the greatest and most enduring, are already won, not only "over there" but here and everywhere—on "no man's land" and on every man's land, and in every man's brain and soul and lifted ideals. These

victories are bringing us hard sense as well as sublime motive; they are practical because of high moral value; they are teaching us how to live and what to live for. Here in America they mean all that comes with thrift, discipline, temperance, conservation, curtailment of luxury, the peace that follows hard work for great ends, the dignity and joy of pulling together unselfishly, the inspiration to fulfill the struggling hopes of oppressed peoples. We fight, not as our enemy for conquest and subjugation, but for government by the governed and for international justice. The great moral issue voices the difference between a despotic and an altruistic spirit; the difference between *Deutschland über alles* and America for all.

In America we are building imperishable traditions and unifying our democratic individualism into deep, common purposes. We are strengthening both national consciousness and national conscience, proving democracy's excellence and stability and commending, as a moral obligation, its liberty and justice to all governments. The supreme peril of the ages is developing not only our heroic and ambitious virtues, but all the finer and sympathetic humanities. The deeds done for freedom will throb in the breast of the world forever, and no superimagination can foretell the progress and achievement that will follow the present intensity and concentration of man's thought, whether applied to land or sea or air, or the countless activities there. The ministrations of the Red Cross and all other humanitarian agencies for relief are lifting mankind into an atmosphere of universal good will. The great movements to restore and reeducate disabled soldiers and to find for them the means for self-support that are essential to self-respect are reconstructive processes that bring to our collective life the habits of cooperation and brotherhood.

But how is the Indian related to all this? He is a part of it, actively, integrally. It is his opportunity, his education, his experience, his remaking. In the midst of the most decisive and expansive achievements of all history he is a learner of the eternal principles involved; he is a student of the rights of individuals, of nations, and of international ethics. He is in contact with very much both at home and abroad that has to do with the war. Moreover, he has arrived at the intelligence and moral attitude of the American viewpoint. It is something to challenge attention when eight or ten thousand of a race which within the memory of living men knew little beyond the restraints of barbarism cross the ocean as crusaders of democracy and civilization.

It is reasonably due the Indian to mention the contributions of his more primitive endowments to the methods and strategy of modern warfare, as disclosed in individual adroitness of attack, in trench tactics, in concealed approach and creeping offensive and in

many successful features of reconnoissance and maneuver, which are conceded to be largely borrowed from the aboriginal American who was ever a natural trailer, who slipped noiselessly through tanglewood and made himself a part of the trees, who was a born sharpshooter, a scout by intuition and an instinctive artist in the intricacies of camouflage. The student of American military operations tells an interesting story of the accretions to military science and practice filtered from Indian warfare between colonial days and the tragedy of the Little Big Horn.

Severe indictments against the Government's connection with the Indians have appeared in former years, from sources acting under executive authority, proclaiming "a shameful record of broken treaties and unfulfilled promises." It will not be denied here that the Indian through long years of disappointment was crowded back and back until literature lamented him as a vanishing race with broken arrows and dead campfires, and art sculptured him in hopeless desolation at the end of the trail. Certainly the original American who felt himself the first homesteader of this continent and in his native honesty could comprehend no prior rights to all its plains and rivers and forests has found himself too often relegated to rocky regions or arid wastes where sustenance must be coaxed from unwatered sands. Recent administration, however, has had no part in such conditions. The later attitude of the Government toward the Indian has been a sympathetic, humane, yet definitely practical one. It has recognized him as a man, the first and hyphenless American, possessing a quick intellect, a glowing spirituality, an ardent love for his children, a brave heart, and fidelity to his promise until betrayed. These must be accepted as human attributes and are so proven by the large percentage of Indians who to-day attend church, live in well-arranged houses, are English-speaking citizens and voters, capable artisans, successful in business, in the learned professions, in literature, and in legislative assemblies.

Our recent policy clearly has been that we want no dead Indians, good or bad, but will do all in our power to save their lives and keep them in health. That much has been fundamental, and every possible energy has been directed to that end. The facilities have not been fully adequate, but the remarkable results are seen in better homes, better sanitation and hygiene, more healthy, laughing babies, and more vigorous, happy adults.

After life and health has come the Indian's education, and all previous efforts have been increased to provide for him schools and industrial training, to teach him to use his brain efficiently and his hands skillfully, to send men of practical experience to assist him in farming, gardening, and stock raising. The splendid output of our

school system and the greatly enlarged product of Indian tillage and live stock are the answer to these efforts.

Under that policy it has been our purpose to protect the Indian's property and his personal rights, to make it difficult for sharks and shysters to despoil him of his just possessions or exploit him for mercenary gain, and, so far as possible, to stand as a friend and counselor between him and unscrupulous mischief-makers, who encourage discontent in quest of fat fees for correcting conditions that do not exist.

Finally, we have begun the speedy release from guardianship of all Indians found to be competent to transact their own affairs, giving to all such a full control of their property of whatever description and recognizing their status to be the same in every respect as the white man's.

In all these things our aim has been to extend the helping hand, to restore the Indian's faith in friendship, and give him reason to feel that his welfare is a part of the general welfare, his interests one with the white man's, his advancement essential to our collective progress. We have endeavored especially to further his desire for individuality, self-reliance, initiative and the ability to stand alone, upon the truism that no man will become interested and progressive in the things he does not desire.

This policy has been in a marked degree fruitful. It is not too much to say that it has developed notably the Indian's confidence in the Government, made him feel that its flag is his flag, its weal his weal, its warfare his warfare, its destiny his destiny. It has revived the dauntless spirit of his ancestry and transformed it into the valorous stuff of American patriotism, so that he feels it an honor and a privilege to volunteer his service in defense of all that our Government with its laws and institutions means to ourselves and to the world. This policy, if continued, I believe can not fail to dissolve tribal bonds, remove inter-racial barriers, rescue the Indian from his retarding isolation, and absorb him into the general population with the full rights and immunities of our American life to which he is entitled from any standpoint of justice and wise statesmanship.

### THE NEW DECLARATION OF POLICY.

On April 17, 1917, we announced a declaration of policy which contemplated the release from governmental supervision, with all of their property, of practically all Indians having one-half or more white blood, and those with more than one-half Indian blood shown to be as capable of transacting their own affairs as the average white man, also all Indian students over 21 years of age who complete the full course of instruction in the Government schools, receive diplomas and demonstrate competency.

In the workout of the "new policy" the department is able to release from governmental control the "white Indians," and those who have demonstrated their capacity, at the same time enlarge and intensify its interest in the Indian who really needs aid and protection. In its application thousands of Indians have been given their freedom, and while some of those released have not sustained themselves, on the whole, this advanced step has been fully justified. It is the beginning of the end of the Indian problem.

Since the passage of the act of May 8, 1906 (34 Stat., 182), and modifying acts, there have been issued 16,500 patents in fee, covering 2,086,722 acres of land. Since April 17, 1917, the date when the declaration of policy became effective, there have been issued 6,456 patents in fee, involving 987,844 acres. In other words, the number of acres patented since the declaration of the "new policy," less than 18 months, nearly equals the area patented during the preceding 10 years, and the number of patentees is nearly two-thirds of the number to whom patents have issued during the 10 preceding years.

Of the 550 Blackfeet Indians who were declared competent during the year 1918, 120 have been issued patents in fee, only two of whom have disposed of their lands.

Competency commissions have visited the following reservations: Cheyenne River, Coeur d'Alene, Fort Berthold, Fort Peck, Hayward, Kiowa, Klamath, Lower Brule, Otoe, Oneida, Ponca, Pawnee, Pottawatomi, Shoshone, Standing Rock, and Umatilla. They have also visited among the Five Civilized Tribes.

### EDUCATING THE INDIAN.

We are more and more recognizing the fact that the Indian in his tribal state was not without a system of education suited to his needs. The young men were trained in adventure, endurance, and skill. The young women were trained in making the camp and in keeping it in order, in providing fuel, and in tanning and dressing skins and making them into articles of clothing. In other words, the Indian youth was taught the things he needed to know in order to protect himself and to provide for his physical needs with due regard to the prevailing conditions of his environment. While the chief aim of his education was to enable him to get a living, just as the chief aim of our education is to give us knowledge and the ability to make a living, still we should not overlook the fact that the Indians' system of education did not neglect cultural training. His tribal ceremonies, tribal lore, tribal art, tribal handicrafts, and his native music are all evidences of his appreciation of the cultural side of life. While he constantly emphasized the individualistic point of view, he also pursued cultural occupations for the satisfaction they afforded; he developed skill and courage for the purpose



of advancing his personal standing in the tribe; and he acquired a knowledge of tribal ceremonies for the sake of individual salvation and influence over others.

This individualistic aim of education was necessarily narrow and selfish. It tended to subordinate the welfare of the whole to the advancement of the individual. The progress of the tribe as a whole was not definitely planned and sought. The Indian under his tribal organization did not reach the state of conscious evolution. He was content to pursue the even tenor of his way with little thought of social progress or efficiency.

In our policy of absorbing the Indian into the body politic of the Nation, the aim of his education must be broad enough to include both the welfare of the individual and the good of society. We must also take into account the development of those abilities with which he is peculiarly endowed and which have come down to him as a racial heritage—his religion, art, deftness of hand, and his sensitive, esthetic temperament.

**THE COURSE OF STUDY.**—The course of study for Indian schools provides, through its prevocational and vocational courses, for educating the Indian youth along practical lines. The best part of all human knowledge has come to us through the five senses—the senses of sight, hearing, taste, smell, and touch—and the most important part of education has always been the training of those senses through which that best part of knowledge comes. The faculty of accurate observation, the acquisition of skill in doing, and the habit of careful observation, reflection, and measured reasoning are best acquired through the proper training of the senses. The opportunities enjoyed by the boy on a farm for training eye, ear, and mind; the discipline and motor training of the fundamental trades, such as those of the carpenter, blacksmith, mason, painter, plumber, etc., for boys; and practical courses in domestic science, domestic art, housekeeping, hospital nursing, etc., for girls, are recognized by the leading educators of the day as affording the best training possible for secondary schools, and they are characteristic features of the curriculum for Indian schools.

The central idea of the course of study for Indian schools is the elimination of needless studies and the employment of a natural system of instruction built out of actual activities in industry, esthetics, civics, and community interests. The development of the all-round efficient citizen is the dominating feature. So we are now teaching the Indian boys and girls to design and make beautiful and useful things with their hands; to study and understand the practical application of the laws of nature, and to apply and appreciate art in the cooking and serving of a meal, in the making and fitting of a garment, and in the furnishing and decorating of homes;

in designing and making useful tools and furniture, in building convenient, comfortable, and sanitary houses; or, peradventure, in making two ears of corn grow where only one grew before.

Nor is the cultural side of the Indian child's education neglected. In our larger schools we have literary societies, religious organizations, brass bands, orchestras, choirs, athletic clubs, physical culture classes, art classes, and various other student organizations and enterprises for promoting cultural training.

Educators everywhere are more and more recognizing the fact that the conventional curriculum of the ordinary school is an accumulation of years of custom, and that there is all too much of nonessentials and unprofitable repetition in the elementary courses. Especially is this true as to the subjects of geography, arithmetic, history, physiology, etc. For a long time these subjects were usually taken up in the primary grades in simple form and repeated in the intermediate and grammar grades with slight modification and in a little different language. Such repetition is not calculated to arouse the enthusiasm of the average boy or girl, and it is a waste of time to require a pupil to go over and over the same subject through two, three, or four grades in the usual perfunctory way without much serious consideration as to the aim to be attained or the motive.

As to nonessentials, it is a saving of time and expense to leave them out and thus make room for more practical and useful subjects. For example, in arithmetic, such subjects as powers and roots, ratios, and average, approximations, divisibility, foreign money, metric system, partial payments, duodecimals, stocks and bonds, etc., have been eliminated from the course of study for Indian schools.

As the Government Indian schools constitute an independent educational system they are at liberty to deviate from the conventional and to fit their courses of study to conform to the needs of their pupils.

With studies properly adjusted to the pupils' needs and with nonessentials and useless repetition eliminated, it is possible to provide daily three to four hours of productive industrial work on the farm, in the shops, or in the various domestic departments of the schools, without serious handicap to the academic work. Along with this productive work is given definite, systematic instruction, so that the pupil learns the theory while acquiring skill in doing.

The chief educational value of any sort of productive work lies in the plan employed in organizing and supervising the work and in logical, definite, systematic method of giving the class instruction. Experience has demonstrated that no teacher ever becomes so proficient that definite lesson plans are not essential to the best results.

The course of study for Indian schools requires that all teachers, both academic and industrial, prepare daily lesson outlines and follow them as closely as possible.

The following daily lesson plans in cooking for one week illustrates the form recently adopted and now in general use throughout the Indian School Service:

### SAMPLE DAILY LESSON PLAN.

*For week ending September 5, 1917.*

#### LESSON NO. 1.

**Subject:** Cooking (prevocational).

**Lesson assignment:** The kitchen, page 130, Course of Study.

**Aim:** To teach proper equipment for the home kitchen.

**Plan:** 1. Take pupils to kitchen and explain parts of cookstove, how to operate, and how to build fire.

2. Teach names of utensils—their cost, use, and care.

3. Discuss arrangement of kitchen furniture and equipment.

**References:** The Home and the Family, Kinne and Cooley, page 131. From Kitchen to Garret, Van de Water.

#### LESSON NO. 2.

**Lesson assignment:** Personal Hygiene in Kitchen, page 130, Course of Study.

**Aim:** To teach order, neatness, and sanitation.

**Plan:** 1. Discuss proper dress, care of hands, nails, hair, etc.

2. Write important rules on blackboard.

3. Make inspection of class as to neatness of person, calling attention to any untidiness.

**References:** Food and Health, Kinne and Cooley. Manual of Personal Hygiene, Pyle.

#### LESSON NO. 3.

**Lesson assignment:** Dishwashing, page 130, Course of Study.

**Aim:** To teach proper method.

**Plan:** 1. Discuss requisites—hot water, soap, dishcloth, etc.

2. Demonstrate and explain proper method.

3. Discuss relation of dishwashing to garbage can.

**References:** Kitchen and Dining Room Work, Willard. House Sanitation, Talbot.

In addition to the primary and prevocational courses, the following vocational courses are provided:

#### COURSE IN AGRICULTURE.

##### *First year.*

##### FIRST TERM (20 WEEKS).

English.  
Vocational arithmetic.  
Industrial geography.  
General exercises.  
Music<sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice.<sup>2</sup>  
Farm implements.

##### SECOND TERM (20 WEEKS).

English.  
Vocational arithmetic.  
Agricultural botany.  
General exercises.  
Music<sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice.<sup>2</sup>  
Land selection and testing.

<sup>1</sup> Optional.

<sup>2</sup> Theory, 1½ hours per week; practice 22½ hours a week.

*Second year.*

**FIRST TERM (20 WEEKS).**

English.  
Vocational arithmetic.  
United States history and community civics.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice. <sup>2</sup>  
Horticulture and poultry.  
Soils and soil fertility.

**SECOND TERM (20 WEEKS).**

English.  
Arithmetic.  
United States history and community civics.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice. <sup>2</sup>  
Horticulture and gardening.  
Farm machinery; gas engines.

*Third year.*

**FIRST TERM (20 WEEKS).**

English.  
Agricultural physics.  
Farm accounts.  
General history.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice. <sup>2</sup>  
Farm animals (types and breeds).

**SECOND TERM (20 WEEKS).**

English.  
Agricultural chemistry.  
Farm accounts.  
General history.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice. <sup>2</sup>  
Farm animals (diseases of).

*Fourth year.*

**FIRST TERM (20 WEEKS).**

English.  
Field crops.  
Insects and insecticides.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice.  
Feeds and feeding.

**SECOND TERM (20 WEEKS).**

English.  
Plant diseases.  
Rural economics.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Farm practice.  
Farm management.

The above course in agriculture is planned and conducted with the vocational aim clearly and definitely dominant. The work in agriculture is the important and determining work, the nucleus about which the academic work is arranged. The character and amount of the academic work is determined by its relation and importance to the problems of agriculture and its vital necessity to the future Indian farmer. The aim is to produce not a scientist nor a specialist, but a practical, efficient farmer, whose success will depend fully as much upon his skill in doing, which results from practice and training, as it results from scientific knowledge and managerial ability. The course includes all of the work which is found on the ordinary, diversified farm. This will fit the Indian

<sup>1</sup> Optional.

<sup>2</sup> Theory, 1½ hours per week; practice, 2½ hours a week.

boys to return to their own land, situated under whatever conditions it may be, and adapt themselves to those conditions and successfully undertake the type of farming which must be followed there.

The work in history, civics, economics, and English aims definitely at training for citizenship. The general living conditions and school atmosphere as well as the social life and student enterprises add materially to the effectiveness of this work.

#### COURSE IN MECHANIC ARTS.

##### *First year.*

##### FIRST TERM (20 WEEKS).

English.  
Vocational arithmetic.  
Industrial geography.  
General exercises.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Mechanical drawing or architectural drafting.  
Shop practice. <sup>2</sup>

##### SECOND TERM (20 WEEKS).

English.  
Vocational arithmetic.  
Elementary botany.  
General exercises.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Mechanical drawing or architectural drafting.  
Shop practice. <sup>2</sup>

##### *Second year.*

##### FIRST TERM (20 WEEKS).

English.  
Vocational arithmetic.  
United States history and community civics.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Mechanical drawing or architectural drafting.  
Shop practice. <sup>2</sup>

##### SECOND TERM (20 WEEKS).

English.  
Vocational arithmetic.  
United States history and community civics.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Mechanical drawing or architectural drafting.  
Shop practice. <sup>2</sup>

##### *Third year.*

##### FIRST TERM (20 WEEKS).

English.  
Physics.  
Shop mathematics.  
General history.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Mechanical drawing or architectural drafting.  
Shop practice. <sup>2</sup>

##### SECOND TERM (20 WEEKS).

English.  
Chemistry.  
Shop mathematics.  
General history.  
Current events.  
Music <sup>1</sup> (band or orchestra).  
Physical training.  
Mechanical drawing or architectural drafting.  
Shop practice. <sup>2</sup>

<sup>1</sup> Optional.

<sup>2</sup> Theory, 1½ hours a week; practice 20½ hours a week.

*Fourth year.***FIRST TERM (20 WEEKS).**

English.  
 Industrial history.  
 Shop mathematics.  
 Current events.  
 Music <sup>1</sup> (band or orchestra).  
 Physical training.  
 Shop practice.<sup>2</sup>

**SECOND TERM (20 WEEKS).**

English.  
 Rural economics.  
 Shop mathematics.  
 Current events.  
 Music <sup>1</sup> (band or orchestra).  
 Physical training.  
 Shop practice.<sup>2</sup>

Trades may be selected from the following: Carpentry, blacksmithing, painting, printing, masonry, plumbing, steam fitting, steam and electrical engineering.

No course in mechanic arts in any school conducted as a school can turn out experienced master craftsmen. The function of this course is (1) to help a boy to find himself and to select that life work for which he seems best fitted and has most chance of success, and (2) to give him such trade and technical information and training as to enable him to leave school not a finished workman, but a partially trained workman, who, after getting real trade experience, will become the exceptionally trained and skilled workman, capable of acting as foreman, boss, contractor, or manager.

The academic work contributes definitely and distinctively to trade problems, so that this work, too, may function in the future life of the mechanic. This work supplements the practical work, and fits the student to plan work, to follow the plans of others, to make estimates, and to do work in a businesslike, orderly way. The practice work aims to give an orderly experience in and reasonable familiarity with processes, operating machines, doing trade work, selecting and using materials, planning jobs, and directing work. In all practical work the student is taught to apply and use the academic work.

**COURSE IN HOME ECONOMICS.***First year.***FIRST TERM (20 WEEKS).**

English.  
 Vocational arithmetic.  
 Industrial geography.  
 General exercises.  
 Music.  
 Physical training.  
 Cooking.<sup>2</sup>  
 Sewing.<sup>2</sup>

**SECOND TERM (20 WEEKS).**

English.  
 Vocational arithmetic.  
 Agricultural botany.  
 General exercises.  
 Music.  
 Physical training.  
 Cooking.<sup>2</sup>  
 Sewing.<sup>2</sup>

<sup>1</sup> Optional.

<sup>2</sup> Theory, 1½ hours a week; shop practice, 20½ hours per week.

<sup>3</sup> Theory, 1½ hours per week; practice in cooking, sewing, and housekeeping, 20½ hours per week.

*Second year.***FIRST TERM (30 WEEKS).**

English.  
 Vocational arithmetic.  
 United States history.  
 Community civics.  
 Current events.  
 Music.  
 Physical training.  
 Cooking.<sup>1</sup>  
 Sewing.<sup>1</sup>

**SECOND TERM (30 WEEKS).**

English.  
 Vocational arithmetic.  
 United States history.  
 Community civics.  
 Current events.  
 Music.  
 Physical training.  
 Cooking.<sup>1</sup>  
 Sewing.<sup>1</sup>

*Third year.***FIRST TERM (30 WEEKS).**

English.  
 Household physics.  
 General history.  
 Current events.  
 Music.  
 Physical training.  
 Cooking.<sup>1</sup>  
 Sewing.<sup>1</sup>

**SECOND TERM (30 WEEKS).**

English.  
 Household chemistry.  
 General history.  
 Current events.  
 Music.  
 Physical training.  
 Cooking.<sup>1</sup>  
 Sewing.<sup>1</sup>

*Fourth year.***FIRST TERM (30 WEEKS).**

English.  
 Child study and motherhood.  
 Household insects.  
 Home architecture, decoration, and sanitation.  
 Current events.  
 Music.  
 Physical training.  
 Cooking.<sup>1</sup>  
 Sewing.<sup>1</sup>

**SECOND TERM (30 WEEKS).**

English.  
 Rural economics.  
 Household accounts and household management.  
 Current events.  
 Music.  
 Physical training.  
 Cooking.<sup>1</sup>  
 Sewing.<sup>1</sup>

The girls who take the course in home economics should become the model housewives and mothers in the communities to which they return. This course bends all its efforts to training them to that end. All of the work in housewifery is planned and conducted with the home of the farmer or workman of moderate means in mind. Therefore the work is essentially practical rather than idealistic. Management of such a home and of such an income is emphasized throughout. Training for motherhood and for the cultural and artistic part of the home life is also provided, i. e., these girls must be able to make their future homes pleasant and attractive as well as economically and hygienically efficient, and they must give to their

<sup>1</sup> Theory, 1½ hours per week; practice in cooking, sewing, and housekeeping, 20½ hours per week.

children the culture and refinement essential to racial progress. This part of their education must be secured through training in social observances and usages through the special type of English work provided for this course, through the special courses dealing with home management, motherhood, and the care of children, and through the several art courses.

Special effort is made to preserve all that is best in Indian folk tales and hero stories as a race heritage, which is to be handed down by mothers to their children as an inspiration for racial advancement and progress. In the same way but in larger measure Indian art is fostered and encouraged in every possible way. Girls are encouraged to get all that is best in their tribal art, to become proficient in its use, to understand its symbolism, and to apply it to the materials and furnishings of their new types of homes.

Special attention is also given to fitting these girls to take part in the social and community life of their future neighborhood and to enable them to exercise a helpful and wholesome influence on all community activities.

By fully appreciating and keeping constantly in mind the probable future living conditions of Indian students, the difference which must be made in teaching the various subjects of these courses as a part of a vocational course, and in teaching the same subjects as merely cultural or college preparatory courses, there is little trouble experienced in properly correlating the academic and the vocational work of the schools, and in giving to the Indian boy and girl the academic and vocational training which will function properly in their lives after they return to their homes, or take up the work of their chosen vocation in competition with whites away from the reservation.

**PUBLIC SCHOOL ENROLLMENT.**—Indian children other than those of the Five Civilized Tribes in Oklahoma have been enrolled in public schools to an approximate number of 10,828. Of these, 2,436 children have been received in these schools under contracts made with 186 school districts, which have provided for payment of a fixed amount per pupil per day of actual attendance, in accordance with the practice adopted a few years ago. The daily rate so paid is determined chiefly by the cost to the school district for operation per pupil. The total amount of money obligated for payment of tuition under all of these contracts was over \$60,000. The amount actually paid will of course fall below the amount obligated because of a failure to maintain a perfect measure of attendance of the Indian children enrolled.

**GENERAL SCHOOL POLICY.**—Increased attendance of Indian children in the State public schools has an important and a direct bearing upon the entire problem of Indian education. In communities where the public-school system has been developed the eventual enrollment



of Indian children therein will of course take them out of the Government Indian day and boarding schools. This will lead first to a decrease in the size of the Government school and in some instances it will become possible to abolish certain schools with a consequent material saving to the United States, as the cost of education of Indians in the public schools is less than in the Government schools. Especially is this the case with a boarding school. In my declaration of policy of April 17, 1917, which was given in full in the annual report for the fiscal year 1917, I pointed out that in many of our boarding schools Indian children are being educated at Government expense whose parents are amply able to pay for their education and where the children have public-school facilities at or near their homes, and that such children should not hereafter be enrolled in Government Indian schools supported by gratuity appropriations except on payment of actual per capita cost and transportation. Pursuant to this policy, the elimination from Indian boarding schools of those children not properly eligible has been carried on during the past year, but has not been fully consummated.

The amount of money available for support of the Government Indian schools has for many years been limited by law to a fixed sum per capita. Up to the last few years this amount has been fixed at \$167 per pupil, but at present the law permits the use of \$200 in schools where the attendance exceeds 100 pupils and \$225 where the attendance falls below 100, special authority therefor being granted by the Secretary of the Interior in the latter case.

The last legislation upon this subject is contained in the Indian appropriation act of March 25, 1918, to the effect:

That hereafter, except for pay of superintendents and for transportation of goods and supplies and transportation of pupils, not more than \$200 shall be expended from appropriations made in this act, or any other act, for the annual support and education of any one pupil in any Indian school unless the attendance in any school shall be less than 100 pupils, in which case the Secretary of the Interior may authorize a per capita expenditure of not to exceed \$225: *Provided*, That the total amount appropriated for the support of such school shall not be exceeded: *Provided further*, That the number of pupils in any school entitled to the per capita allowance hereby provided for shall be determined by taking the average attendance for the entire fiscal year and not any fractional part thereof: *Provided further*, That the foregoing shall also apply to expenditures for the fiscal year ending June 30, 1918.

The effect of this legislation has been to necessitate a large enrollment or attendance in the boarding schools, and superintendents have felt impelled to obtain sufficient pupils to enable them to expend such an amount of money as they have found essential to the proper conduct of their schools, although they have been given definite instructions to eliminate from, or not to enroll, noneligibles in their schools and have endeavored to comply.

Legislation of this character has worked to the disadvantage of the schools by placing a premium upon a full enrollment rather than upon the character of such enrollment and on eligibility of the applicants. During the period of the war every possible economy is being exercised in the operation of the Indian schools in spite of well-known conditions which have resulted in increased cost of labor and materials and an endeavor is being made to operate the schools within the amount of money so limited for support of each pupil. However, during normal conditions these amounts so allowed are entirely inadequate, and it is hoped that after war demands have ceased and conditions become normal a more liberal policy will permit the expenditure of sufficient funds to properly maintain the Indian boarding schools and enable full adherence to the present course of study, and especially the industrial training which is covered thereby.

**PUBLIC SCHOOLS IN EASTERN OKLAHOMA.**—An appropriation of \$275,000 was given in aid of the public schools within the territory comprising the Five Civilized Tribes and the Quapaw Agency in Oklahoma, and of this there has been expended the sum of \$261,614 in payments to 2,292 public-school districts. In these schools about 18,869 Indian children were enrolled and have been attending in association with the white children of the community. The total enumeration of Indian children in the same territory is 25,612, of whom there were enrolled in tribal boarding schools 1,347, in private mission schools 565, and in Indian nonreservation schools 827, making a total of 21,608 Indian children of the Five Civilized Tribes in schools of some character.

An important decision regarding the right of Indian children to attend white schools was obtained as a result of the suit of *Dorothy Sunrise v. District Board of Cache Consolidated School District No. 1, Comanche County, Okla.* The Cache Consolidated District refused to accept for enrollment several children presented by the local superintendent. Every means of persuasion having failed, the case was filed in the district court, praying for a writ of mandamus compelling the acceptance of one of these children, which resulted in a decision by the court that the Indian child was entitled to attend the school as a pupil and to all rights and privileges of the school. The children were admitted to the school and have been properly and graciously treated since.

The decision is a very important one, bearing on the rights of these Indian children to attend the white schools.

**SCHOOL CHANGES.**—About 20 day schools were abolished because of public-school facilities available to the pupils, or suitable accommodations for them in other Indian schools; and 3 boarding schools were

discontinued for similar reasons. On the other hand, 5 day schools were established in localities where educational provisions were lacking, and the Bloomfield Seminary, Five Tribes, was reopened. These changes were made to better supply the actual school needs of the Indian children and to reduce expenses.

**CERTIFICATES OF COMPETENCY TO GRADUATES.**—In the work of our advanced schools giving thorough courses in vocational training, conscientious effort has been made to carry out the purpose of the declaration of policy of April 17, 1917, in its following provision:

Indian students, when they are 21 years of age or over, who complete the full course of instruction in the Government schools, receive diplomas, and have demonstrated competency, will be so declared.

During the year eight nonreservation schools were authorized and equipped for four-year periods of vocational instruction, with appropriate academic work, above the sixth grade. This instruction and practice was along the lines of agriculture and practical trades best suited to the occupational needs of the boys and in home economics for the girls. Since the introduction of these course requirements in February, 1916, not all of these vocational schools have accomplished the equivalent of work necessary for graduation. Last year six of them reported successful graduates, varying in number from half a dozen to 40 or 50. About one-half or more of these students were below the age of 21 and therefore not immediately eligible for competency recognition, but will be considered when they reach the age required. Of the remaining, some 30 odd were considered educationally competent and so declared. Young men graduates were fewer in number last year because of those who entered war service before completing their education. Special care is exercised in passing upon the qualifications of these graduates, regarding not only their proficiency at school but their experience and contact with white people, their property interests and probable capacity for handling the same, their industry, habits and character, to the end that a certificate of educational competency, when issued, shall be, in the absence of later adverse developments, a reasonable basis for issuance of a patent in fee. A certain percentage of these cases are therefore held in abeyance until the graduates shall have further proven their ability by actual contact with the practical conditions of life out of school. It is my purpose to keep in some degree of personal and friendly touch with these young men and women who are commissioned to go out and make their own way, and so a letter of helpful and suggestive spirit is written to each recipient of a competency certificate inviting a response after a year or so of experience in the outside world. I feel that this may have a human and sympathetic value

and that it is worth while. School and reservation superintendents are also requested to follow up these young people and report as to their progress in self-support. Below are two samples of such letters to competent graduates, together with a copy of the certificate awarded in another instance.

MAY 2, 1918.

MISS BELLE PENISKA

(Through Superintendent Carlisle School).

MY DEAR MISS PENISKA: I send you the inclosed certificate of educational competency, feeling that you have earned such recognition. I am pleased with some of the things said about you, one of which is that you are conscientious and always try to do your best. That trait of character will go far toward bringing success to anyone, and it is needed just as much in one calling as another. I note also that you incline to the duties of home making, which is commendable, because there is nothing in the world that helps more to make people happy and progressive than well-ordered, efficient, and refined housekeeping. These conditions are the purifying and elevating influence of all community life. High-minded, sweet-tempered home-keepers are the bringers of strength and virtue to social welfare. Hold fast to your highest ideals; they will be among your best friends in any work you do. Should you acquire any land hereafter, be careful in its management, and feel free to consult this bureau, if you desire, about any matter affecting it.

I give you my best wishes and would like you to write me a year hence and tell me how you are doing and something of your plans. I will also ask for a report about you from the superintendent at Carlisle.

Sincerely yours,

(Signed)

CATO SELLS,  
Commissioner.

JUNE 1, 1918.

MR. HARRY PERICO

(Through Superintendent Chilocco School).

MY DEAR MR. PERICO: In pursuing the course of printing, I am pleased to note that you have attained proficiency and have done good work in your craft away from the school, and feel that you will be worthy in every way of the confidence expressed in the inclosed certificate of educational competency.

I commend your attitude of readiness for war service, if called upon, and your desire to extend your education. No one is ever too old to become better educated.

I also note that you are reported to have an allotment of 120 acres of land, besides some money on deposit, and I wish you to be very careful in the handling of your property. Every young man should add to his money savings each year. Let me urge you to develop and study the best productive value of your land; keep it free from encumbrance and do not place yourself in a position where you have to sell it. No material possession is better to keep than good land.

You have the true progressive spirit, and I shall expect to hear favorable reports about you from your school superintendent. I should also like you to write me a year hence something of your plans and prospects.

Sincerely yours,

(Signed)

CATO SELLS.  
Commissioner.

## UNITED STATES BUREAU OF INDIAN AFFAIRS—CERTIFICATE OF EDUCATIONAL COMPETENCY.

This certifies that Everidge Benton, a five-eighths blood Indian, of the Choctaw Tribe, having satisfactorily completed the course in commercial training at the Haskell Institute Indian School, as authorized by the Commissioner of Indian Affairs, was awarded a diploma of graduation at the close of the school year 1917, and from this record and other information submitted concerning his work as a student he is regarded as possessing such character, judgment, and educational qualifications as render him reasonably competent to transact his own business and to care for his own individual affairs.

Given at Washington, D. C., on this 12th day of June, nineteen hundred seventeen.

[SEAL.]

CATO SELLS.

*Commissioner.*

THE CARLISLE INDIAN SCHOOL.

The United States Indian School at Carlisle, Pa., will not continue as an institution for the academic and vocational training of Indian boys and girls, but is being turned over to the War Department to be used for Army hospital purposes, and for the rehabilitation and reeducation of sick and wounded soldiers. While the actual transfer will not be finally made until September 1, 1918, yet the plans therefor have been fully perfected and partly carried into effect. The educational system of the Indian Department will not suffer because of the abolishment of the Carlisle School, as the student body has been considerably depleted by enlistments in the Army and Navy, and the war industrial requirements are such as to demand many older pupils who might otherwise be enrolled as students. Therefore accommodations for the Carlisle students are available in other Indian schools and arrangements are being made for their transfer to well-equipped schools located nearer the vicinities in which they reside, which will be to their advantage in many respects rather than otherwise.

This important transaction will create surprise among many, and possibly regret to those who have had intimate knowledge of the great influence of this school as an educational factor among the Indians, but it can not fail to meet with general approval and the most cordial patriotic sanction when the facts and demands of the present conditions are considered. The sick and disabled soldiers of the American Army must have adequate care and treatment and this need is constantly increasing. The medical department of the Army has been in quest of suitable buildings and sites for hospitals, and there is present urgent need for such facilities as can be utilized with the least possible delay. Moreover, post-war problems are already at hand and reconstructive measures must be initiated. A large factor in this work is the reeducation of soldiers physically disabled in the war. The school plant at Carlisle is well adapted

to this purpose and many of its buildings, with a little alteration, can be speedily used for hospital purposes, while its extensive shops and much of its machinery and equipment afford the requisites for vocational training and for the practice of new occupations or the new ways of following old trades.

The following correspondence between the Secretary of War and the Secretary of the Interior concerning the transfer of the Carlisle School is self-explanatory:

WAR DEPARTMENT,  
*Washington, July 9, 1918.*

MY DEAR MR. SECRETARY: The Army medical department has been looking for suitable buildings and sites for hospitals. We are greatly in need of hospital facilities at the present time. My attention has been drawn to the Carlisle Indian School, which, because of its far eastern location and remoteness from the centers of Indian population, might be available for this purpose, especially as under the law of 1882, which created the Indian School at Carlisle, its return to the Army was provided for under certain eventualities.

I am wondering whether the Department of the Interior would care to consider the advisability of turning this property back to the Army for hospital purposes and for the rehabilitation and reeducation of the sick and wounded from the war. I am informed that there is a very considerable equipment there which might be utilized for this purpose.

Cordially, yours,

(Signed) NEWTON D. BAKER,  
*Secretary of War.*

The honorable the SECRETARY OF THE INTERIOR.

THE SECRETARY OF THE INTERIOR,  
*WASHINGTON, July 16, 1918.*

DEAR MR. SECRETARY: I have your letter of July 9, asking whether the Indian School plant at Carlisle, Pa., could be turned over to the Army for hospital purposes and for the rehabilitation and reeducation of the sick and wounded soldiers.

I find that the pupils now enrolled in the Carlisle School can be accommodated in other Indian schools, and in view of the need by the Army of an institution of this character, I have given my consent to the turning over of the plant for the purposes indicated.

I have asked Commissioner Sells to arrange to vacate the plant by September 1, and suggest that any matters pertaining to the use of furnishings or equipment be taken up with him by such official of your department as you may designate.

Cordially, yours,

(Signed) FRANKLIN K. LANE.

HON. NEWTON D. BAKER,  
*Secretary of War.*

## HEALTH.

The health work of the Indian Service throughout the past fiscal year was conducted under increasing difficulties, owing to the patriotic response of many of our physicians and nurses to their country's call, yet, due to the impetus given the campaigns on the various reservations during the immediately preceding years, a definite progress has been recorded.

All our health activities are planned and promoted upon the principle that permanent results in these matters must come through popular education in sanitation, ventilation, care of children, care of the sick, domestic economy, etc. Despite the loss of many health workers this line of endeavor has been faithfully carried forward to the greatest possible extent and much good has been accomplished. Another hardship which has been keenly felt is the greatly increased prices of all supplies, particularly medicines, drugs, and surgical instruments, the cost of which it has been necessary to meet with appropriations no larger than those of former years, or not increased proportionately to the advanced cost of the material, for the purchase of which they were intended. A patriotic spirit of endeavor, however, has actuated our employees, and a faithful attempt has been made to secure the best possible results with the facilities available.

Tuberculosis and trachoma continue to furnish two hard problems to solve in upbuilding the health of the Indian race. Notwithstanding the loss of physicians, it has been possible to operate all of our sanatoria during the year, and many cases of tuberculosis have been treated therein. Additional facilities have also been provided, and in some instances existing institutions have been enlarged, where the need was imperative, either by limited new construction, or through the purchase of buildings already completed, or by remodeling.

The endeavors to eradicate trachoma have suffered principally from the loss of specialists who were employed particularly for this work. These losses, however, occurred during the latter part of the fiscal year, so that the work was continued with but little abatement, and much has been, and is being, done to suppress this disease among the Indians. It is not uncommon to find trachoma entirely under control and practically eradicated at many of the boarding schools, due to the effective treatment which is possible when suitable control can be exercised over the cases. The greatest difficulty in this work exists among the older infected Indians who are more difficult to reach and treat, and as a consequence remain as foci for the dissemination of the disease. Accordingly everything possible is done to place them under treatment where feasible, and to educate them in cleanliness, in order to prevent contagion.

Continued emphasis has been laid upon the better babies' movement, which was actively inaugurated year before last, and which demonstrated such remarkably immediate and gratifying results. This campaign has now become a regular feature of the reservation activities and will continue to receive the earnest attention and efforts which it merits.

A number of schools and reservations were visited during the past year by epidemics, including smallpox, "liberty" measles, pneumonia, and acute influenza. Measles is always dreaded among Indian children, a common sequel being tuberculosis, and for this reason all possible steps were taken to prevent the spread of the disease and to give those infected proper care and after treatment. Fortunately, the epidemics for the most part have not been of a severe nature and, as a rule, serious results did not follow.

Among the Navajos and Hopi Indians in Arizona and New Mexico considerable trouble has been experienced with smallpox, which, though of a mild form, became epidemic among these people during the last year. Vigorous steps were immediately taken to suppress this contagion, special physicians and the medical supervisor being detailed for the purpose of conducting a campaign of vaccination. Hundreds of Indians were vaccinated and it is now known that the efforts of these physicians, which were augmented and continued after their departure by the regular medical forces on the reservations, have placed the disease under control. Of especial interest in this connection is the campaign of vaccination conducted by the supervisor of hospitals among the Hopi Tribe living upon the Moqui Reservation. These people dwell in communities and for that reason are more amenable to quarantine and control than the nomadic Navajos. The supervisor in his report upon this work states that every Hopi Indian not presenting a history of recent successful vaccination, or who had not had smallpox, was immunized in this campaign, and he is of the opinion that the whole tribe has been rendered immune.

At the Haskell Institute during the past spring a severe epidemic of influenza, or as observed in many parts of the United States a combination of streptococci and influenza bacilli, accompanied by pulmonary complications suddenly developed, resulting in several deaths among the pupils. For the purpose of assisting the local medical force in handling this epidemic, and for the purpose of investigating its source, a special physician and nurse were immediately detailed to the school, and the services of an epidemiologist from the Public Health Service were secured. Prompt measures succeeded in keeping the mortality down to a minimum. High winds and dust storms were prevailing at that time in the country surrounding this school, and the consensus of opinion seemed to be that the infection was wind-borne



Altogether, the health propaganda of the Indian Bureau is rendering its most righteous service. The perpetuation of the race is a first consideration. Education, and the protection and accumulation of property are greatly to be desired; to this end we are exerting ourselves to the uttermost, but everything is necessarily secondary to life.

### IRRIGATION.

Irrigation was practiced to a considerable extent by many Indians of the southwest long before the white man came to this country. Evidences of prehistoric canals and ditches, among the Pimas in Arizona, bear mute testimony of the genius and industry of these people who eagerly grasp the improved facilities offered by the white man and the belated assistance extended by the Government. When the Spaniards came to New Mexico they found the Pueblo Indians packing baskets of earth on their backs to repair their old ditches or construct new ones to irrigate additional lands.

Irrigation is or should be resorted to in those localities where rainfall is insufficient or is not dependably sufficient for crop production. Fundamentally, it consists of the artificial application of water to land for agricultural purposes.

Water for irrigation is ordinarily secured by damming rivers, pumping from underground reservoirs or impounding flood-waters. The first has been longest used and is the most general. Pumping water has been resorted to with satisfactory results, and in some localities is the best, if not the only means, of supply. The impounding of waters which would otherwise be wasted is a method of conservation which has been utilized to a great advantage and is certain to be more extensively employed. There are millions of acres of land, particularly in the southwest, that could in this way be brought under cultivation. Such land lies largely in semiarid sections, where drought and crop failures are so frequent and disastrous as to make failure to employ this feasible solution an economic crime. A notable example of flood-water conservation, from an intermittent and ordinarily limited flow, has been successfully effected in damming a branch of the Trinity River, near Fort Worth, where a great lake, containing an immense and permanent supply of water, has been created. What has been done to furnish water for the city of Fort Worth, and for pleasure purposes, can be as successfully accomplished for irrigating land not only in Texas but everywhere, under like conditions, throughout our entire country.

The fast growing population of the United States and the constantly increasing requirements for food production demand that every acre of tillable land should be made to yield each year to the full extent of its possibilities.

It is indefensible and inexcusable that man whom God has ordained to reign on earth over animate and inanimate things should fail to bring together, for his own benefit, immeasurable land and water waste.

Irrigation has been made enormously profitable by diverting the waters of constantly flowing streams, likewise by pumping from undersurface reservoirs, and the impounding of flood waters has been successfully used in a limited way in semiarid sections, but the time has come when the limit of our possibilities in this last respect must be employed.

The world's war is being directed by the master mind in the White House. The downfall of autocratic governments is writ so plain that he who runs can read. The aftermath, with the successful termination of the war behind us, will involve much more than the reconstruction incident to enlarged human liberty. A people responsible for revolutionizing our all-powerful but faulty financial system through the creation of a Federal Reserve Bank law, making possible the greater local use of wealth production, is certainly capable of taking advantage of the gifts of nature, readily within reach, and subduing the untamed land and water conditions awaiting the head and hand of man.

Truly, America has been prodigal of its natural resources. Golden opportunities lie right at our feet in the development of those great areas of the Southwest where the soil is fertile, the climate salubrious, and the possible yields truly marvelous.

On one Indian reservation alone the aggregate value of the crop raised during the past year exceeded \$6,000,000. On another reservation a 5-acre tract in alfalfa yielded over \$2,000, the hay having been harvested nine times during the calendar year.

**COLORADO RIVER RESERVATION, ARIZ.**—To accommodate the ever-increasing demand for water at this point, an additional pumping unit was installed during the year. The irrigable lands on this reservation are highly adapted to the production of long staple cotton, and every acre that can be brought under ditch is eagerly sought. The pumping plant is designed to provide water for lands allotted to the Indians only. Upward of 100,000 acres of equally fine land within the reservation could be irrigated by gravity from the Colorado River. A project of this size, however, would cost several million dollars. Congress has not yet authorized the work, although the recent Indian appropriation act carries a small sum for preliminary surveys and investigations at this point. The work should be undertaken, as the latent agricultural possibilities here are tremendous.

**CROW RESERVATION, MONT.**—The aggregate amount expended in irrigation work on this reservation during the year approximates

\$150,000. Main canals and laterals were enlarged and extended so as to bring additional land under ditch; suitable concrete headgates and other structures installed, and many bridges and smaller structures of timber erected. When completed the system on this reservation will serve upward of 70,000 acres. During the year just passed some 13,720 acres were cultivated, with an aggregate crop yield valued at \$223,176. The recent Indian appropriation act makes \$200,000 available to continue the work.

FORT HALL RESERVATION, IDAHO.—Some 12,000 acres within this reservation were cultivated during the past year, 7,712 acres by lessees of Indian land and 5,085 acres by the Indians themselves, an increase of over 3,000 acres. The principal crops are alfalfa, grain, potatoes, and sugar beets, the aggregate value of the crops raised on this project during the year exceeding \$500,000. A number of difficulties hamper the most successful operation of this system. The canals and ditches constructed years ago are not of sufficient grade and carrying capacity to serve the area ultimately to be irrigated. The rapid growth of aquatic plants quickly diminishes the carrying capacity of the canals, already too limited; concrete structures improperly designed and constructed, without steel reinforcing, are constantly cracking and settling. Exposure to rigid frost action during the long winters augments this trouble. Other appropriators on the Blackfoot River, above the reservation headings, divert water justly belonging to the Indians and constant attention is demanded to see that their rights are protected. Excess waste, return and drainage waters discharged into Sand Creek by white irrigators, flow down into one of our main canals in such intermittent quantities as to seriously jeopardize its successful operation, frequently resulting in considerable damage to the Government's property.

GILA RIVER RESERVATION, ARIZ.—The Indian appropriation act of May 18, 1916, carried two items for the construction of diversion dams across the Gila River, one near the agency at Sacaton and the other outside the reservation, above the town of Florence. When constructed the dam at the agency will serve Indian lands exclusively, while the one above Florence will serve lands belonging to both Indians and whites. Extensive unexpected erosion of the south bank of the Gila River, at the lower dam site, so widened the river channel as to render the appropriation insufficient for the work. Congress gave additional funds in the recent Indian appropriation act. Plans and specifications covering this dam, which is to carry a bridge superstructure, have been completed and approved and it is expected that the work will be undertaken at an early date.

Construction of the upper diversion near Florence is contingent upon a satisfactory adjustment of conflicting claims to water between Indetha ins and the whites. Negotiations have been continuous,

conferences repeated, and even tentative agreements reached. Binding contracts have not been executed, however, and recent developments indicate that the owners of certain interests in and around Florence have repudiated the former tentative agreement as to a division of these waters. This postpones actual construction indefinitely, as the work is not to begin until these conflicting claims are settled.

**NAVAJO RESERVATION, ARIZ. AND N. MEX.**—The scarcity of water in the large territory occupied by the Navajo and Moqui Indians renders the irrigation possibilities there exceedingly limited. Out of an aggregate area exceeding 12,000,000 acres, water is now available for some 6,500 acres only; 1,500 acres under the Ganado Project in the southern part of the reserve; 4,000 acres under the Hogback Project, near the San Juan School, and 1,000 acres near Marsh Pass, in northern Arizona. Investigations are being continued from time to time as funds are available, with a view of ascertaining additional areas for which water may be developed, but at best these will be very small, and as far as can be seen at present this vast domain must primarily remain a stock-raising proposition.

In my last annual report I referred briefly to the development of underground water for domestic and stock watering purposes, intimating that the problem confronting the Navajo is not one of grass but of water. Winter rains and summer cloudbursts produce considerable vegetation in regions bare of living streams or perennial springs. Ample forage is frequently at hand if water for domestic and stock needs can be found. The underground water developed for these Indians during the past few years has been of untold value to them during the extreme drought that has visited the southwest recently. Not only have thousands of head of stock been saved to the Navajos, but it has helped in no small way to augment the supply of wool, mutton, and beef available for market. These Indians have always been practically self-supporting, wresting at least a bare existence from an inhospitable country, but under recent market conditions many of them are becoming well-to-do, and a number even independent. Raw wool has been commanding such fancy prices lately that the making of Navajo rugs, formerly a source of considerable revenue, has practically ceased.

**UINTAH RESERVATION, UTAH.**—The controversy over water rights in the Uintah Valley, adverted to in my previous report, is still pending before the District Court for the State of Utah, a decision in the matter not yet having been handed down. In the meantime a reasonably satisfactory division of the available water between the Indians and the whites is being had through a water commissioner appointed by the court.

Large areas of unallotted land within this reservation were opened to homestead entry years ago and it is the settlers on these lands who are now contesting the prior right of the Indians to sufficient water for their needs. In the entire district there are some 46,000 acres under irrigation, being an increase of 11,000 acres over the past year. This represents an increase of over 30 per cent. The value of the crops raised by the Indians themselves exceeded \$95,000.

**YAKIMA RESERVATION, WASH.**—One of the most successful large irrigation projects with which the Indian Service has to deal is located on the Yakima Reservation, Wash. Designed to supply 120,000 acres, ultimately, we find over 64,000 acres now under actual cultivation. During the past year the crop yield exceeded \$6,000,000. The Indian appropriation act for the present fiscal year carries \$500,000 for the continuation of this work, which is being pushed as rapidly as existing conditions will permit. Machinery is resorted to, wherever possible, as a substitute for hand labor, and the three drag-line excavators at work on this project removed 602,354 cubic yards of earth at an average cost of 10 cents per cubic yard. This is 50 per cent cheaper than estimated for several years ago, when labor and supplies were less expensive.

**WIND RIVER RESERVATION, WYO.**—Present plans call for the irrigation of approximately 73,000 acres within this reservation, of which some 50,000 acres are now under ditch. About \$200,000 was expended in this work during the year just ended, resulting in the addition of many miles of main canals and distributing laterals, with the attendant diversion structures, bridges, etc. Drainage of certain seeped areas had to be resorted to, with satisfactory results. Considerable areas within this reservation are leased, and still others are devoted to the cattle industry. The area actually cultivated yielded a gross return of over \$325,000, of which \$142,181 belonged to the Indians and \$182,883 to the whites.

**ZUNI RESERVATION, N. MEX.**—About 5,000 acres within this reservation are now under ditch, being supplied with water from a reservoir constructed years ago. The rapidity with which this reservoir is filling with silt is becoming alarming. Since its completion 11½ years ago the reservoir has lost 54 per cent of its capacity from this cause. At this rate the life of the reservoir is about 21 years, of which 11½ years have already passed. The capacity of the reservoir is decreasing, of course, in proportion to the deposit of silt, and unless some form of relief is soon devised the reservoir will be practically useless. The life of the reservoir may be extended temporarily by elevating the crest of the present dam and spillway, but the extent to which this can be carried is limited by natural surroundings. It has been estimated that an expenditure of \$13,000 in increasing the height of the dam will add possibly 11 years to the life of the

reservoir, but eventually some other form of relief must be devised or the project abandoned. These Indians are industrious, are expert agriculturists, and make full use of the facilities offered for industrial advancement.

**SALT RIVER VALLEY, ARIZ.**—One of the largest and most successful irrigation projects in the country is located in the Salt River Valley, Ariz. Here some 200,000 acres, a part of which belongs to the Indians, are being supplied with water from the Salt River, augmented during the dry season with stored water from the Roosevelt dam. The unit cost of this project has been fixed at \$60 per acre for construction purposes. During the past several years many acres in this valley have been shown to yield between \$300 and \$400 per acre. These lands lie within that area adapted to the growth of the long staple Pima cotton, a product developed and brought to its present state of perfection on the Pima Indian Reservation. For this cotton there is a most urgent demand, as it weaves into a fabric of great textile strength which is used, when obtainable, exclusively in the manufacture of automobile tires and aeroplane wings. For many years to come the demand for this cotton will be insatiable. Within the past 12 months the market price of this cotton has been between 70 and 80 cents per pound. Under reasonably favorable conditions the normal yield from this cotton averages a bale to the acre. Many acres produce more. Even at 70 cents per pound this would give an average gross yield of \$350 per acre. Allowing \$250 which is excessive, to cover all costs of production, labor, etc., it would still leave a net yield of \$100 per acre annually. This is from the lint alone. In the past it has been impossible to supply the demand for the seed from this cotton and additional areas are being planted to this product as rapidly as the seed can be obtained. The value of the seed produced, added to the returns from the lint, yields a net income on the investment that is truly marvelous.

These figures sound astonishing but they are being demonstrated daily, and all of this comes from intelligent application of water to arid areas, otherwise worthless for agricultural purposes.

## AGRICULTURE AND STOCK RAISING.

**FARMING.**—The campaign for increased production on Indian land to meet war-time conditions, as outlined in my last annual report, has been further systematized and aggressively followed up during the year with continued good results. Reports thus far received indicate that the Indians on 75 reservations are cultivating 370,101 acres of land, as compared with 317,101 acres last year, which represents an increase of 52,990 acres.

Practically every reservation showed an increase ranging from 5 per cent to 100 per cent. Lack of rain on several of the reservations

where the percentage of increase was comparatively small prevented a better showing. Hundreds of Indians are cultivating their land this year who never farmed before, but who have enthusiastically caught the spirit of the campaign for increased production, and many others have enlarged their cultivated acreage. Here are several typical extracts from field reports:

James Baker is 38 years old, has a wife and six children, and is one of the Indians to whom citizenship papers were issued last year. Jim is a sober, industrious fellow, and has about 50 acres of wheat, 30 acres of oats, and 25 acres of flax, and has acquired a nice herd of cattle. He is, I feel, an Indian who since receiving his citizenship has really been prosperous.

Wallace Altaha, R-14, is the one large stockman of the tribe. His herds have long been notorious for the poor breeding and lack of intelligent management. He has always stood against improved breeding. During the winter and spring he has purchased 31 pure-bred Hereford bulls, of fine quality, and 15 grades that are very good. Also, during the winter his herds were worked and some 400 or 500 old steers, bulls, and cows gathered and sold. Some of these were 12 to 15 years old, and quite a menace to breeding and proper handling.

These results have been accomplished in spite of the handicap of an inadequate farmer force. There are approximately 250 such positions authorized, with about 80 vacancies at the present time, only 20 farmers having been appointed on certification from the Civil Service during the past year, largely owing to the small salaries that can be paid from the limited funds available for this purpose and the more attractive opportunities outside this service.

That the impetus of the campaign inaugurated last year might be further stimulated, the following follow-up letter was sent out by me on August 15, 1917:

TO SUPERINTENDENTS:

Reports show increased acreages cultivated by the Indians this season on practically every reservation, ranging from 5 per cent to 100 per cent, the average being 31.6 per cent. While this is gratifying, it should mark only the beginning of our labors. The reports likewise disclose considerable areas of unused tillable land on the different reservations, with many able-bodied male adult Indians not now engaged in farming or other gainful occupations, the majority of whom undoubtedly should be cultivating their allotments.

But this is only one feature of the campaign. In addition thereto every Indian now farming must be induced to increase his cultivated acreage to the limit of his capacity in man, animal, and machinery power. Present conditions portend a continued and perhaps an increasing shortage of foodstuffs in the Old World and a consequent greater responsibility on the United States to utilize every acre of tillable land in the production of foodstuffs to feed ourselves and our allies. Press home the tremendous import of this fact to employees and Indians alike, with the view of keeping alive and further developing the enthusiasm and momentum of the campaign inaugurated last spring. Two things especially should be strongly emphasized during the remainder of this season: (1) The necessity of the Indians saving seed for next year and of the superintendents making provision for an adequate supply of seed in ample time for next season's planting on the agency and school farms. This is vitally important and must not be neglected, especially in view of partial crop failures in some parts of the country. (2) Fall plowing: On those reservations where

fall plowing is proper, according to the best agricultural practice, effort should be made to have as much land plowed this fall by the Indians and on the agency and school farms as will be put in crops next spring. See that this is accomplished so far as advisable and practicable on your particular reservation.

The reports also indicate an increase of approximately 48 per cent in the acreage cultivated on the agency and school farms. This could not have been accomplished without the whole-hearted cooperation of superintendents and employees, and I wish here to express my appreciation. However, the success of the past season should only spur us on to greater efforts to bring under cultivation as much of the unused tillable land on the agency and school farms as can be handled properly consistent with available facilities and funds. Example is much stronger than precept, and if we expect our appeal to the Indians to be effective, we must surpass our own record of the past season on the agency and school farms.

Please acknowledge receipt of this letter, with information as to the plans which you have formulated to increase the number of Indians farming and the total cultivated acreage, and to provide for the necessary seed to meet the needs of the Indians and the Government.

The important subjects of food conservation by the elimination of waste and cooperation with the National and State food administrations, canning and drying, cooperative extension work with the United States Department of Agriculture and the various State colleges, bee culture, and the utilization of surplus Indian labor were also emphasized during the year and are more fully referred to in connection with war activities in this report.

**STOCK RAISING.**—During the past year the need for increased food production has been brought to the attention of the Indians and the employees of the Indian Service with a view of having them exert their energies toward the development of the live-stock industry on all Indian reservations in order that meat production might be increased. The scope of the activities necessary to accomplish this can best be presented by reproducing my instructions to superintendents and others under date of May 2, 1918, as follows:

**TO THE SUPERINTENDENTS:**

The Indian Service, and by that I mean the Indians and the employees of the service, has responded effectively to the war call for increased food production along all lines, and in every way has shown a willingness and ability to do its part. Large areas of hitherto unproductive agricultural lands have been brought under cultivation and the live stock grazing on Indian lands has been materially increased, so that the grain, meat, and other food supplies of the country have been largely augmented by the energetic handling of Indian resources.

But while I feel that the results of the past year's work have been splendid, I am sure that this year, by reason of the valuable experience gained last year, can be made to show greater results, both to the country and to the Indians themselves. It is with that purpose in view that I want to call your attention to several things which I believe will greatly increase the output of meat and other live-stock products through the efforts of the Indians themselves and the more intensive use of their grazing lands.

At the present time, when requests are made by cattlemen for grazing lands, I am telling them that practically all the Indian lands are carrying stock to their full capacity, and this is literally true as conditions now exist; but I am convinced that proper



attention given to certain factors of the grazing problem will enable us to increase the capacity and output of the Indian ranges to a surprisingly large extent. These factors are:

1. Water supply.
2. Fencing.
3. Winter protection, including proper relation of summer and winter grazing.
4. Wild or worthless horses.
5. Predatory animals.
6. Scrub stock.
7. Care and handling of bulls.
8. The salt supply.
9. Winter feeding.

I want you to take up the subjects enumerated in the preceding paragraph and make a careful study of conditions on your reservation with respect to each one of them.

**WATER SUPPLY.**—Probably the most important factor in connection with the utilization of grazing ranges and the one where most effective improvement may be made is that of water supply. There are ranges where large areas of grass are never eaten over because of the distance the cattle must travel in grazing to and from water. On nearly all of these ranges it is possible to develop water at points so located as to make the entire range available; or, if not all of it, at least to largely increase the grazing capacity, and this at a cost so as to be well within the bounds of practicability. To allow this waste of grass to continue is unbusinesslike and indefensible, and I want you to be exceedingly careful in your investigation of the water supply on the grazing lands of your reservation.

It makes no difference whether the range is used by the Indians or is under permit. If under permit, and you find that the capacity can be increased by water development, the matter will be called to the attention of the permittee, and he will be required to make such development and then stock to capacity, or vacate and the permit given to some one who will. If the needed development is on Indian range, ways and means will be found to do the work. No grass must be allowed to go to waste that can possibly be made available.

After you have carefully gone over the situation sufficiently to enable you to make a general outline of your plans I want you to submit a special report to me on this matter of water supply, and this report should be in my hands not later than July 1, 1918.

**FENCING.**—First-class fencing is a highly important factor in promoting the stock industry. The out-boundaries of all grazing ranges should be well fenced to prevent controversy between permittees and to protect homesteaders or other occupants of the contiguous lands; it also makes it much easier to keep check on the number of cattle being run by permittees and gives a general feeling of security that is very beneficial.

But important as it is to have the range boundaries well fenced, it is even more essential that all Indian allotments actually being used by the Indians and lying within a grazing range be so fenced as to give adequate protection to the crops and improvements. I am constantly receiving complaints from Indians because of cattle trespassing, due to poor fences. In granting permits hereafter, one of the requirements must be a provision for adequate fencing of boundaries and improved Indian allotments, and this provision must be strictly enforced. Many existing permits contain the provision, but the fences are not being kept up as they should be.—Have your fences inspected as soon as possible and take vigorous steps to have them repaired and kept in good condition.

**WINTER PROTECTION, INCLUDING PROPER RELATION OF SUMMER AND WINTER GRAZING.**—Where the grazing area on a reservation is divided into two or more ranges,

the division lines should have been so run, if possible, as to give each range the proper proportion of winter and summer grazing, with its share of winter protection. This has not always been done when the ranges were first laid out, and as a result there are ranges that are not carrying the number of cattle they should.

On most reservations the I. D. herd occupies a range set apart for it, and if in any instance this I. D. range does not have good winter feed and protection, and other ranges under lease or permit do have it, I desire that some rearrangement be made at the first practicable opportunity, so that the cattle of the Indians may have the needed protection. Good management of a cattle range requires the conservation of grass on some part of it for winter use, and this should be accomplished by keeping the cattle off of such parts of the range during the summer as are most suitable for winter grazing. In some cases this can be done by riders, but probably in the majority of cases a dividing fence is the most economical and efficient method of dividing the summer and winter ranges. Of course, no hard and fast rule can be laid down to cover this phase of the grazing question since so many different factors enter into its consideration, but I want to impress each superintendent with the importance of giving the subject careful attention along the lines suggested.

**WILD OR WORTHLESS HORSES.**—The grass being consumed each year by wild horses, and also worthless Indian ponies, if eaten by cattle or sheep would bring a revenue at least five times as large to the Indian owners and would have a material bearing on the world's meat supply. A very conservative estimate of the total number of these animals on Indian reservations would be not less than 75,000 head, and since two horses consume as much feed as three head of cattle, this is equivalent for pasturage of 112,500 head of cattle, or at the ratio of five sheep to one of cattle—562,500 head of sheep.

The horses included in the above estimate are only those which have never been improved by breeding, and they are running on territory which makes it exceedingly difficult to accomplish much in the way of upbreeding, and where the difficulty of catching them largely prevents the Indians from disposing of them at the proper time, hence they remain on the range far beyond the time of greatest profit; in fact the larger proportion of these horses die from old age, disease, or lack of feed during hard winters, so that the owners never get anything for them.

The extreme need of the country for meat and wool will not permit of any delay in working out the problem of ridding the ranges of these worthless horses. We must expect opposition from some of the older Indians and from the nonprogressive Indians generally. This opposition is not based, so far as I can learn, on mere contrariness or desire to be obstructive, but because they retain the old idea that the power and influence of the man was largely in proportion to the size of his pony herd; and it occurs to me that this very habit of thought may be turned to splendid advantage in inducing the Indians to increase their holdings of cattle and sheep, if the greater value of cattle and sheep can be impressed upon them.

If, after everything possible in the way of persuasion has been tried, the Indian still refuse to dispose of worthless stock, I believe the superintendents should be authorized to require that each Indian keep this class of horses within fenced inclosures, and that all such horses found on the open range should be seized and sold, the proceeds to be turned over to the owner of the brand, less the cost of capture and shipment.

I desire that every superintendent on whose reservation this problem exists give the matter his best thought and attention and that reports be made to me at an early date with recommendations covering plans for disposing of horses of the class herein discussed.

**PREDATORY ANIMALS.**—I find that on many of the larger and more unsettled reservations there is a considerable loss each year from predatory animals. Some of the

Indians, lessees, and permittees are very active in ridding their ranges of these pests while others are careless and do practically nothing. This "do-nothing" policy results in the propagation of stock-killing animals which range far beyond the boundaries of the careless stockman, causing loss to other lessees and to Indians whose cattle are either with the lessees' stock or on the range set aside for exclusive Indian use.

I want the superintendents to take up this matter of predatory animals with the Indians, and with each lessee and permittee, and insist that vigorous measures be taken to destroy them. In this connection it is suggested that the cooperation of the lessees, permittees, Indians, and superintendent would make possible a comprehensive and thorough campaign which would be far better than desultory and unconcerted effort on the part of each.

**SCRUB STOCK.**—Indian cattle run on many of the ranges which are under lease or permit, and because of this, if for no other reason, the lessee or permittee should be required to keep only first-class bulls in order that the Indian stock may be bred up. This is just as essential for the good of the lessee or permittee as it is for the Indian, and the country at large constitutes another interested party because of the fact that a first-class beef-producing animal will consume no more grass than will a poor scrub animal that will go to the market weighing less than half as much.

On some reservations it has been found difficult to induce the Indians to use good male stock on account of the seemingly high prices at which first-class breeding animals are sold. Many of the Indians, when starting out for themselves, have perhaps two or three head of the stuff, and, of course, it would not be practicable to require each of these small owners to provide a pure-bred bull for his stock. However, this difficulty is overcome in some instances by following a sort of community plan whereby bulls are provided from tribal funds and the Indians are required to pay pro rata for their services, and this plan should be followed generally.

In the case of an Indian who owns sufficient she stuff to require the entire service of one or more bulls, it would certainly not be any hardship to require him to provide a first-class animal, because it would pay him to dispose of enough of his she stuff to enable him to make such purchase.

Of course, it goes without saying that every superintendent and every stockman and farmer should talk "better stock" to the Indians, in season and out of season, and be ready to help the moment an Indian evinces a desire to raise better stock.

**CARE AND HANDLING OF BULLS.**—In all tribal herds, and among Indian-owned range cattle as well, the bulls should be held apart from the she stuff during such part of the year as will prevent the dropping of calves at an unseasonable time. The proper breeding season varies according to the location of the range, but generally the bulls should be gathered at the time of the fall roundup and held in separate range until after the following spring roundup, when they should be thoroughly distributed over the range.

This segregation of the bulls, in addition to insuring the dropping of calves at a time when weather conditions are apt to be favorable also affords the opportunity to give special care and attention to the bulls during the winter. The bull pasture should be kept free of stock during the time the bulls are with the herd, so as to conserve the natural feed for the winter. In addition to this, extra feed, consisting of hay, and in some cases a little grain, should be provided, to be used when necessary to keep the animals in good condition. In short, do everything possible to have the male stock in first-class physical condition when turned onto the breeding range. When placing the bulls with the herd be careful to have them well scattered, and have the range riders see to it that they keep well apart and do not bunch up or become separated from the remainder of the herd.

The number of bulls required for a given number of cows varies with the condition of the range, the water supply, and age of the bulls. Give the matter careful thought and attention and see to it that enough bulls are on the range to insure adequate service.

**THE SALT SUPPLY.**—It is of great importance that all cattle ranges be well supplied with salt. This is in many respects essential to securing the best results, and each lessee or permittee must be required to distribute salt over his range in appropriate places and in sufficient quantities to meet the needs of the animals. Where tribal herds are run, the superintendent should see to it that the range occupied by the herd and individual Indian cattle is well supplied.

**WINTER FEEDING.**—In past years, when the western country was open grazing for all comers, it was the practice among cattlemen to let the stock rustle for themselves the year around. As a general rule, the cattle came through the winter in pretty fair shape, because the cattlemen had almost unlimited territory from which to select their winter-grazing ranges, but conditions have changed, and the cattleman now finds himself restricted to a limited range on which, in all probability, there is no good winter protection, and if he wants to bring his cattle through he must in many cases provide protection and feed, at least for the weaker cattle, and the proportion of fed cattle is rapidly increasing each year.

Good business practice requires that animals worth from \$80 to \$150 apiece be not allowed to die for want of a little protection and a few dollars' worth of hay and grain; the need of the country for conservation of all foodstuffs, including meats, also demands that no cattle be allowed to starve or die from exposure during the winter.

In view of the foregoing it is incumbent upon every superintendent to wage a vigorous campaign each summer to induce every Indian cattle-owner to put up sufficient hay to carry his stock through the winter, and further, wherever the severity of the climate makes it advisable, the Indians should be required to provide sheds or other artificial protection.

In the case of tribal herds the superintendent should take up early in the season the matter of providing hay for winter feeding, so as to get on the market for the first cutting, when the price is usually the lowest and the quality the best. Plenty of hay is the best insurance against loss. And as one of the primary reasons for the establishment of the tribal herd, in most instances, was to provide a market for the Indians' hay, it should be the aim of the superintendent to have the Indians furnish every ton possible, after putting up an ample quantity for their own individual needs. The advantages of this home market for their hay should be preached to the Indians constantly as an incentive to greater efforts along farming lines, thus demonstrating the value of the combination of stock raising and farming.

On northern reservations, where the danger from sudden severe storms is ever present during the winter months, it would be advisable, where practicable to do so, to gather the poorest cattle on the fall roundup and throw them into a fenced pasture held in reserve during the summer and where they could be easily gathered for feeding when the storms come on.

The superintendent should carefully observe the practice of the lessees or permittees on his reservation, and if any of them are careless with respect to winter protection and feeding, and allow their cattle to die of neglect, this fact should be reported to me, in order that steps may be taken to stop the waste, and, if necessary, cancel the permit and give the range to someone who will take proper care of the stock and thus conserve the meat supply.

I have gone somewhat at length into the various phases of the cattle business, with a view to making proper use of the grass on Indian reservations. I do not want any ranges overstocked; in fact, I am afraid that under present conditions there are some reservations where too many cattle are now being run, and if this is the case the results will be an eventual loss of cattle more disastrous by far than would be the loss from allowing some of the grass to go to waste. There is, however, a point of efficiency in this matter, which is reached when well-bred cattle are eating all the grass that can be made available on Indian reservations, and it should be the ambition of every superintendent to reach this point on his reservation.

These suggestions have met with a hearty and gratifying response from the field employees, Indians and lessees, largely due to the fact that it is in line with the aggressive policy of the Indian Bureau for the last five years to utilize the natural resources of the reservations to the greatest possible advantage.

I regard the water supply in connection with stock raising as of very great importance. It is the essential factor in increasing the carrying capacity of a large part of the grazing lands on Indian reservations. This is particularly true in the Southwest, where, I believe, sufficient water development can be secured, at a justifiable expense, to more than double the present carrying capacity.

Sinking wells on grazing lands during the last year or two in sections of the country where rainfall is almost unknown has, altogether, given gratifying results, and it is my purpose to intensify these activities, not only in sinking wells, but in impounding the flood waters which at rare intervals fall from cloud-bursts and which, together with melted snow from higher elevations, rush in great torrents over countless acres of thirsty territory.

Marvelous results have been secured from irrigating arid and semiarid lands for agricultural purposes, and it is equally important that the vast area of grasslands, now practically worthless for want of stock water, be made, by similar means, to sustain the herds it would then support.

My nearly six years experience as Commissioner of Indian Affairs, during which, among many other things, I have had to do with the administration of immense irrigation projects and the handling of millions of cattle, sheep, and horses, largely in sections of the country where rain seldom falls or where devastating droughts frequently occur, has convinced me that the most important constructive accomplishment now demanded is the proper development, conservation, and use of *water*.

**EXPERIMENTATION.**—The operation of the cooperative experimental farm at Sacaton, on the Pima Reservation, by this office and the Bureau of Plant Industry of the Department of Agriculture was continued during the year, with the view of developing seeds and plants specially adapted to conditions on the Indian reservations in that part of the country. The results have justified the establishment of this farm, which has been somewhat enlarged in order to increase its usefulness to the Indians, and three wells have been drilled for the purpose of providing additional irrigation water.

An experimental date farm was established at Palm Springs, on the Malki Reservation, in California, in cooperation with the experts of the Department of Agriculture, by whom work is also being carried on at Fort Berthold, San Juan, and Shoshone.

**INDIAN FAIRS.**—The policy of holding agricultural fairs on the Indian reservations has been continued during the year, with increasingly successful results. The first fair of this nature was held on the Crow Reservation in 1906, the number being gradually increased each year until, in 1917, 58 such fairs were held. At these fairs the Indians displayed their agricultural products, live stock, etc., in competition with each other, suitable prizes being awarded on best exhibits. Most of the fairs are managed entirely by the Indians, which gives them training in business administration and organization.

Numerous Indian exhibits were also made at county fairs, likewise with good results, the Indians winning many prizes in competition with the whites. In addition, displays of Indian products were shown at nearly every State fair in States where Indian reservations are located, which were equally successful in showing the agricultural progress of the Indians. At the South Dakota State Fair Baby Show the first prize was awarded to Guy M. Howe, jr., an Indian baby from the Crow Creek Reservation, who scored 95.5 per cent out of a possible 100 per cent in competition with babies from all over the State.

### FIVE CIVILIZED TRIBES.

The area of the Five Civilized Tribes aggregated 19,525,966 acres, of which 15,794,208 acres have been allotted to the enrollees of said tribes or to their heirs. By various acts of Congress and by approval of the Secretary of the Interior restrictions against alienation of allotted lands by allottees have been removed from 12,825,196 acres, leaving as restricted acreage 2,888,162 acres, or about 18.3 per cent of the entire allotted area. One hundred and thirty-nine thousand two hundred and eighty-four acres of tribal lands have been reserved for town sites, railroad rights of way, churches, schools, cemeteries, etc.

The total enrollment of the Five Civilized Tribes, corrected to date, is 101,506, including Freedmen, to which enrollees, with few exceptions, there have been made complete allotments of land or payments of money in lieu of or in equalization of allotment. Of the above-mentioned enrollees, 78,101 are citizens by blood, adoption, or intermarriage, 26,774 being full-blood citizens; 23,405 enrollees are Freedmen. There are at present 23,441 of the enrollees who are in the restricted class of Indians; that is, Indians whose allotments are restricted as to alienation and whose funds derived from said allotments or from the individual shares of the tribal funds are subject to Government supervision. Looking to the carrying out of the purposes of the agreements with the Five Civilized Tribes and acts of Congress for the disposal of the tribal property

and the closing of the tribal affairs of said Indian Nations, further sales of the tribal land have been held during the year, and further per capita payments of about \$3,000,000 have been made.

To date of June 30, 1918, 3,558,165 acres of tribal lands of the several Five Civilized Tribes were sold for an aggregate of \$20,249,-032.58, being \$4,505,563 more than the appraised value, an average of \$5.39 per acre. Of the total acreage sold, 1,905,139 acres of unallotted land brought \$10,625,324; 385,935 acres of the surface of the segregated coal and asphalt land, Choctaw and Chickasaw Nations, brought \$3,328,731; and 1,267,821 acres of Choctaw and Chickasaw tribal timber lands brought \$6,294,977. There remain unsold of Choctaw and Chickasaw tribal lands 324 acres of school lands with improvements, 2,280 town lots, and 14,800 acres of Choctaw and Chickasaw tribal lands, including 7,700 acres of timber land, 6,700 acres of the surface of the coal and asphalt land, and 400 acres of other unallotted tribal lands, which will be offered for sale at public auction from October 9 to October 17, 1918.

The coal and asphalt deposits, leased and unleased, underlying the surface of 441,107 acres of the segregated mineral land in the Choctaw and Chickasaw Nations, Okla., will be offered for sale at public auction to the highest bidder, at McAlester, Okla., on December 11, 12, 13, and 14, 1918. Three hundred and twenty-eight thousand two hundred and seventy-six acres of unleased lands will be first offered for sale to be followed by an offer of 112,831 acres of leased lands. The coal and asphalt deposits are appraised in the aggregate at \$14,461,041.73.

Eleven thousand six hundred and ninety-five acres of Choctaw and Chickasaw tribal timber land in McCurtain County have been sold to the State of Oklahoma for a game preserve for \$71,718.05, as authorized by the act of Congress approved May 25, 1918, Public No. 159, 65th Congress. The coal and asphalt deposits, both leased and unleased, underlying the surface of 441,107 acres of segregated mineral land in the Choctaw and Chickasaw Nations, appraised at \$14,461,041.73, will be sold at public auction to the highest bidder on December 11, 12, 13, and 14, 1918, as authorized by the act of Congress approved February 8, 1918, Public No. 98, 65th Congress.

Competency commissions have visited allottees of the Five Civilized Tribes during the fiscal year and are still at work to ascertain who are competent and capable of handling all transactions affecting their allotted lands without departmental assistance.

There were constructed during the year 127 houses, at a cost of \$134,466.67; 51 barns, at \$22,912.95, and 96 wells, at \$8,093.94. There were purchased 472 horses and mules, at a cost of \$63,739.78; 494 cattle, at \$35,766.84; 509 hogs, at \$13,088.66, and 228 wagons, at \$35,092.15. Miscellaneous farm implements were purchased at a

total cost of \$25,544.10. There was disbursed on account of per capita payments, improvements, and individual cash payments to Indians, salaries and expenses, a total of \$12,455,146.08. There was received of individual and tribal funds and congressional appropriations a total of \$16,175,520.73, showing a grand total of all moneys handled for the Five Civilized Tribes during the fiscal year of \$28,630,666.81.

Four thousand Indians of the Five Civilized Tribes have entered the United States Military Service. Six million nine hundred and twenty-three thousand six hundred and seventy dollars of the individual Indian funds of restricted Indians of the Five Civilized Tribes have been invested in Liberty loan bonds and war-saving stamps.

In the Cherokee Nation all the land and tribal property of said tribe has been allotted, sold, or otherwise disposed of except 30 acres erroneously platted as allotted land. The only unfinished work is in relation to the disposition of said 30 acres, the completion of per capita payments heretofore authorized, execution of 138 deeds to allottees, and 3 deeds to purchasers of unallotted land, and the settlement under the provisions of section 18 of the Indian appropriation act of May 25, 1918, of all claims against said tribe.

In the Seminole Nation all the tribal land and property of the Seminole Nation has been disposed of except 122 acres of unallotted land and 640 acres of land that was reserved for a tribal school. The remaining work to be done relates to the disposition of said remaining tracts of land, the completion of the per capita payments heretofore authorized out of the tribal funds, and the execution and delivery of a few deeds to allottees and purchasers of tribal land.

In the Creek Nation the unsold tribal property consists of the tribal council building in Okmulgee, 124 town lots in Muskogee, Tulsa, and Lee, 353 acres of tribal land, and 3 tracts of school property. The value of said unsold property is estimated at \$272,650. The remaining unfinished work relates to the sale or disposition of said tribal property, the equalization of allotments, investigation of alleged duplicate and fraudulent enrollments, and in connection with suits instituted to recover for the Creek Nation certain valuable oil and gas lands, including the beds of the Arkansas and Cimarron Rivers within said nation.

### **OIL AND GAS IN THE FIVE CIVILIZED TRIBES OF OKLAHOMA.**

The total production of oil from restricted Indian lands in the Five Civilized Tribes during the fiscal year ended June 30, 1918, amounted to approximately 13,000,000 barrels of oil from about 116,000 acres. The revenue to the tribe from oil and gas production during the fiscal year amounted to about \$4,000,000. These



oil and gas leases cover allotted lands and are made for a period of 10 years or as long thereafter as oil and gas is found in paying quantities, except leases covering lands of minors which are made to expire when the minor becomes of age, unless oil and gas is found in paying quantities. The leases provide for a royalty of one-eighth of the gross proceeds of the sale of the oil on the basis of the highest price posted by a responsible purchasing company.

On August 10, 1917, regulations were promulgated governing the utilization of casing-head gas produced from oil wells. The regulations provide that the gasoline productivity of the casing-head gas per thousand cubic feet shall be determined by a physical field test of the gas, the royalty being computed at  $12\frac{1}{2}$  per cent on the basis of a fixed schedule according to the yield of gasoline per 1,000 cubic feet and the sale price of the refined product.

### OSAGE OIL AND GAS LEASES.

On November 12, 1917, February 14, 1918, and May 18, 1918, there were sold at public auction at Pawhuska, Okla., leases covering certain Osage lands for oil-mining purposes, aggregating 90,286 acres, for a bonus consideration of \$3,258,312.50, an average of about \$36 per acre. These lands consisted of scattered tracts on the east side of the reservation selected with the object in view of opening up new pools of oil. Leases covering these tracts are for a period of five years and as long thereafter as oil is found in paying quantities, and provide for a royalty in addition to the bonus consideration of  $16\frac{2}{3}$  per cent, except when wells on quarter-section tracts or fractional parts of quarter sections are sufficient to average 100 or more barrels per well per day. The royalty on oil produced is 20 per cent.

The Osage Reservation under which oil and gas is reserved to the tribe until 1931 comprises approximately 1,500,000 acres, of which 680,000 acres on the east side were leased for oil and gas under a blanket lease authorized by Congress, which expired March 16, 1916. New leases have been made covering about 919,000 acres for gas and about 323,000 acres for oil; the oil leases aggregating about 323,000 acres are included in the 919,000 acres leased for gas.

On June 30, 1918, there were 1,450 dry and abandoned wells in the Osage Reservation, 3,755 producing oil wells, and 364 gas wells. The gross production of oil from July 1, 1917, to June 30, 1918, amounted to 10,906,376.59 barrels, of which the Osage tribe received as royalty 1,842,692.21 barrels. The total receipts of the Osage tribe from oil and gas leases from July 1, 1917, to June 30, 1918, amounted to approximately \$8,000,000.

OPENING THE WEST SIDE.—Advertisements have recently been approved and authority granted to offer for lease for oil-mining purposes on November 9, at public auction sale at Pawhuska, Okla.,

approximately 15,000 acres on the east side of the Osage Reservation, that is, east of range 7, and approximately 28,000 acres on the west side, that is, west of range 8. Authority was also granted to offer for lease for gas mining purposes on November 9, approximately 315,000 acres on the west side. No leases have heretofore been made on the west side of the Osage Reservation for oil or gas mining purposes. As the time during which the title to the minerals will remain in the Osage tribe will expire on April 8, 1931, unless otherwise provided by Congress, and in view of the demand for an increased production of oil to meet existing conditions, it has been decided to make this opening on the west side as the initial lease sale on this vast, heretofore practically untouched territory of supposed-to-be oil-bearing lands.

### **OIL AND GAS OUTSIDE THE FIVE CIVILIZED TRIBES AND OSAGE NATION.**

There has been considerable activity in the oil and gas industry in Oklahoma outside the Five Civilized Tribes and the Osage Nation during the past fiscal year.

The bringing in on March 9, 1918, of an oil well with an initial production of several hundred barrels per day greatly stimulated oil and gas leasing on the Kiowa Reservation. Since that time Indians having allotments in the vicinity of this well have received exceptionally high bonuses, the largest being at the rate of \$755 per acre. This is reported to be the highest rate of bonus ever paid in that field, regardless of the distance from the well.

Several wells with a large initial production have also been brought in on the Ponca Reservation, and at Pawnee 12 producing wells were drilled.

One hundred and twenty-five tracts of land on the ceded part of the Shoshone Indian Reservation, Wyo., each containing 160 acres, or less, were advertised for oil and gas mining leases, bids being opened on October 10, 1917. Seventy-four tracts were bid in and leases covering 69 tracts have been regularly executed. Under the terms of the advertisement and the leases the lessee is required to drill at least one well on each tract within one year from the date of execution of the lease by the Secretary of the Interior. The drilling of wells during the calendar year will largely determine whether the land on the ceded part of the reservation is valuable for oil and gas.

### **PROBATING INDIAN ESTATES.**

The probating of the estates of deceased Indians, under the provisions of the act of June 25, 1910 (36 Stats. L., 855, 856), for the fiscal year ending June 30, 1918, progressed very satisfactorily. During the year 2,415 cases were finally disposed of.

The heirs of deceased Indians also must be determined where personal property of a value less than \$250 is involved; where Indians hold restricted fee patents, in which no fee can be collected; where Indians hold inherited interests at a value less than \$250, and cases in which modifications were made in the original findings. One hundred and fifty-seven cases, coming within these classes, were disposed of.

One hundred and fifty-five Indian wills were finally acted on. There were also disapproved during the year 22 wills.

There are now employed in the field 12 examiners of inheritance, who are engaged in conducting hearings on 28 of the reservations and on the public domain.

In addition to the above, 3,745 miscellaneous cases were disposed of and 7,586 letters were written.

### PROBATE WORK IN OKLAHOMA.

In previous years the reports related to the probate work in the Five Civilized Tribes have been largely statistical, but it is intended by this report to explain more particularly the aims of the probate service and to explain the nature of the various lines of work and to describe the ends attained as a whole.

Bearing in mind that the courts of Oklahoma have been given jurisdiction by acts of Congress over the estates of minor and other incompetent members of those tribes, it will be readily appreciated that in a jurisdiction comprising 40 counties, marvelously rich in deposits of oil and gas, of lead and zinc, and of coal and asphalt, from which "rich streams of revenue gush forth," that are materially augmented by the returns from great crops of wheat, corn, cotton, and other staples, into swollen streams of wealth, there will necessarily be vast properties, collectively speaking, as well as large individual estates, which must be disposed of by those tribunals in such a way as to conserve and promote the interests of many Indian citizens or to throw them and their estates upon the mercy of designing speculators who in every community stand ready to prey upon those who most need protection.

And in connection with the foregoing it is an impressive fact that the number of names of restricted Indians appearing upon the approved rolls of the Five Civilized Tribes is upward of 37,000, of which nearly 27,000 are full-blood Indians. No proof is necessary to show that a multitude of cases will arise affecting these Indians and their heirs.

It is the duty of the probate attorneys—a duty which they fully appreciate and faithfully attempt to discharge—to stand guard like sentinels over the property and persons of these Indian wards. To

perform this duty it is necessary for the probate attorneys to keep an ever-vigilant eye upon the dockets of probate cases in the several counties assigned to them and to take whatever action that may be necessary in the premises, either by institution of civil suits or criminal prosecutions.

With respect to guardians and other trustees it is the aim of the probate attorneys to scrutinize their every act to the end that they shall be held to the faithful discharge of their trust, and as a result of this vigilance many of the guardians have been removed or discharged and others, found to be more worthy, have replaced them; in like manner it has been necessary for the probate attorneys to maintain a constant watchfulness with respect to the financial status of each case, to ascertain in each instance whether the bond is adequate, to require a new bond whenever necessary, and to take appropriate action to recover from bondsmen or other sureties whatever losses may result from the misconduct of their principals.

With such care there has resulted a great conservation of Indian money which, under the direction of the probate attorneys, has been applied to useful and beneficial purposes instead of being recklessly squandered. Investments have been made in homes, in land, in interest bearing securities, and the purchase of Liberty bonds. Thus the probate attorneys have been instrumental in teaching the great financial lesson that saving is not for the purpose of hoarding alone, but rather for profitable use.

There is an ever present attempt on the part of land speculators to induce sales of minor lands through the instrumentality of guardians of their own selection, and in some cases such sales have been made upon appraisals made by men chosen for the purpose by the prospective purchasers. This evil has been strenuously opposed by the probate attorneys who seek to keep down as much as possible the number of sales of minors' lands, unless reinvestment of a more desirable nature can be found, and to insist upon the highest prices possible through appraisals by the regular Government appraisers.

There is another part of the work of these attorneys which can not be expressed by numbers, but it is perhaps more beneficial than any other work performed by them. Reference is had in this connection to the countless daily conferences that are held with the many persons who seek the advice and counsel of these representatives of the Government with respect to matters which affect not only their property but also their personal interests, including the education of their children and other domestic matters which are necessarily involved in the advisory relation which they bear to a dependent people.

Responsive to the call of patriotism the probate attorneys have unhesitatingly contributed their efforts to the national cause in the

war that is now pending, and their numbers have been repeatedly lessened by transfers to the military branch of the Government or to other branches of service where their assistance was needed. And so, while it is true that temporary lapses have occurred in the work of individual districts, it must be realized that each man, in the time available to him at his post of duty, has done his utmost for the probate service until assigned to other work.

### A WOMAN PROBATE ATTORNEY.

It may be of interest that during the year a woman was appointed probate attorney. There was general approval of the appointment, and I have reason to believe that this innovation will prove entirely satisfactory. Concerning it and reflecting many similar expressions, the Fort Worth Record, in an editorial, said:

Commissioner of Indian Affairs Cato Sells has appointed Miss Florence Etheridge, of Miami, Okla., probate attorney, with headquarters at Vinita. Her appointment, it is said, is in line with Commissioner Sells's policy of appointing women to responsible positions in the Indian Service. The duties of probate attorney involve the protection of the property of minors and incompetent Indians and the prosecution of wrongdoers in the same connection.

Miss Etheridge was for several years employed in the Probate Division of the Indian Office at Washington, where she demonstrated unusual ability as a lawyer. She is vice president of the National Federation of Federal Employees, and made a vigorous fight before Congress to prevent the passage of the Borland amendment. She is a member of the law firm of Swanson & Etheridge.

There are millions of women wage earners in America. There are millions of girls who are wage earners. There are millions of women and children who are doing farm work. There are millions of women engaged in war-service work. There are millions of women Red Cross workers, and the call has been made for 25,000 Red Cross nurses in addition to those already in the service of their country.

Texas women have been given the primary ballot. Texas women are coming into their own. This is as it should be.

Cato Sells is a champion of equal suffrage. He believes that a woman who does the work of a man should receive the pay of a man. If woman is an intelligent and efficient worker why shouldn't she receive the pay of a man?

### REIMBURSABLE FUNDS.

The act of March 2, 1917 (39 Stat. L., 969-973), appropriated the sum of \$400,000 for use in the purchase of seed, animals, machinery, tools, implements, and other equipment, to be sold to Indians under regulations prescribed for its repayment to the Government. The enthusiasm of the Indians in agricultural and stock raising pursuits has been greatly aroused during the year and in consequence of their increased activities the demands for equipment and stock taxed to the fullest extent the limited reimbursable appropriation available. Unfortunately it has been necessary in many instances

to withhold plans for new development work in order that the most urgent needs might be cared for. Through the use of the money available, however, a large number of Indians have been able to accomplish a vast amount of improvement work on their lands which would not have been possible without the reimbursable assistance given them. The Indians on some of the northwestern reservations are now fairly well equipped so that it will be possible to withdraw much of the aid heretofore given them.

The benefits derived from reimbursable funds appropriated by Congress are being reflected more and more in the industrial improvements on all of the reservations. The Indians as a rule are cautious in requesting assistance from reimbursable funds and restrict their prospective obligations to actual needs and in amounts which they feel capable of liquidating.

The prospects for the return to the Treasury of the money expended for the benefit of the Indians are exceptionally good. Although the money appropriated for the past and previous years, excepting \$30,000, under the law need not be returned to the Treasury until the year 1925, it is estimated that more than \$300,000 has already been collected. The sum of \$30,000 appropriated in the act of March 3, 1911 (36 Stat. L., 1058-1062), was under the law available for use until June 30, 1917. The collections from the Indians are more than ample to reimburse this entire appropriation at this time. Notwithstanding the crops last year were comparatively poor, and in fact in some of the places the Indians did not get back the seed they planted in the spring, it is interesting to note the amount which the Indians at some of the northwestern reservations repaid during the fall of last year and the early part of this year. At Crow Agency approximately \$27,000 were returned; at Tongue River approximately \$15,000 were returned; at Blackfeet approximately \$10,000 were returned; at Warm Springs, where the crops were practically an entire failure, approximately \$5,000 were returned. The collections at many of the other reservations were equally as good, indicating that the Indians are rapidly reaching the point where they are deriving incomes through the use of property furnished to them, thereby justifying the inauguration of the reimbursable plan.

At places where tribal herds of sheep and cattle have been established from reimbursable funds for the benefit of the tribes of Indians as a whole, excellent results are being accomplished. The stock itself is ample security for the repayment of the money expended, and the present indications are that all of the money spent for the tribal herds, both cattle and sheep, will be fully repaid and a good margin of profit remain for the tribe.

### INDIVIDUAL INDIAN MONEY.

Special attention has been given to the method of handling individual Indian money during the past year. The rules and regulations have been modified materially, making it possible for Indians to obtain their funds more easily, thus giving them a chance to show their ability to manage their own business affairs.

While the general policy of conserving minors' funds has not been changed, a more liberal course was followed in the disbursement of their funds. In the case of minors who were nearly of age their funds were sometimes used to secure higher education or for some special kind of training.

Where the minors were young their combined funds were frequently expended in the purchase of property or for improvements to the homestead, it being realized that a comfortable sanitary home and proper surroundings would be of more value to them than would the small amount of money turned over to them when they reach their majority. Through the use of their own or their children's funds a large number of Indians were enabled to purchase seed and raise crops for the common benefit of the family, which would not otherwise have been possible.

When justifiable, the funds of both adults and minors have been used to purchase Liberty bonds, but this subject is fully gone into in another part of the report.

### ANNUITY AND PER CAPITA PAYMENTS.

The practice of placing their funds in the hands of competent Indians for expenditure, without supervision, as announced in my report last year, in conformity with the declaration of policy referred to therein, has been continued, on the whole, with encouraging results, most of the Indians seeming to appreciate the opportunity to handle their own funds and recognizing the consequent responsibility devolving upon them to spend the money wisely, although of course there have been individual exceptions to this rule. However, this is the only way the Indians will ever learn to stand on their own feet as independent citizens of the community.

### EMPLOYMENT FOR INDIANS.

Economic conditions on many reservations are much the same as last year, in that Indians do not have to leave home to find work in abundance. Their concern in home conditions shows a deepening civic interest. State officers of the Department of Agriculture are cooperating with the Indian Service in utilizing the labor of Indians for general farm work. In some localities wheat and alfalfa hay harvest hands were offered from \$4 to \$6 dollars a day.

Next in importance to raising food is transportation. Owing to the value of motor-driven vehicles in pioneer development it is both practical and profitable to give Indians opportunity to learn the construction and repair of such vehicles, and many of them are placed in the high-class factories, where they are switched from one department to another to receive all-around mechanical experience. In the evening they amplify the day's manual practice by attending automobile schools for theoretical information. Two or three years of combined study and experience will develop first-class mechanics. Over 300 Indians have taken advantage of such factory training.

It is especially necessary to have trained operators for tractors who understand the importance of minor, yet essential, details and can make prompt repairs in the field, when accidents occur, that plowing may not be retarded. Many who have enlisted in the Army and Navy are now repairing trucks, aeroplanes, etc., with the American Expeditionary Forces.

One of the strong, self-reliant Indian boys working in the Packard plant has without compensation looked after the welfare of the Indian workers of Detroit factories by meeting strangers as they reach town, helping them to find the factories to which they have been assigned, etc. State prohibition now gives a wholesome environment at Detroit for Indian youths.

Young men and women of Indian blood are filling clerical positions in the different departments of the Government. Two young girls are officers of the National Service School of the District of Columbia, preparing to become instructors in industrial arts to the soldiers invalided home from foreign service. Indians, both men and women, are selling Liberty bonds and war-savings stamps all over the country. The largest stamp sales of this bureau for one day were made by a little Indian girl. Some of the finest war gardens of the country are planted and cultivated by Indian women. A number of returned students have gladly declared their ability to support the children to release their husbands for war duty. One little full-blood woman pays her mother-in-law to stay home and look after the babies while she works faithfully, and has paid for her home and furniture. The husband is at the front. Many other mothers are doing practically the same thing.

**ARKANSAS VALLEY AGRICULTURAL ACTIVITIES.**—Several hundred students from six schools of the Southwest again spent their summer vacation working for over 100 farmers and for the American Beet Sugar Co. in the Arkansas Valley. The Indian boys took their band instruments along for bugle calls and concerts and their baseball outfits for recreation. This colony of workers lives in 15 camps scattered through the valley from Garden City, Kans., to Rocky Ford, Colo. Each camp conducts a separate cuisine; a few unemployed



young men in the draft, awaiting call, and the wives of soldiers and sailors who are supporting their families to release men are selected for cooks. Women having small children, who are considered undesirable in many households and for that reason find it difficult to secure employment, are given the preference. The cooks have given special attention to conserving food and eliminating waste, in accordance with Government regulations. They are using the recipes published by the Food Commission.

Twenty-eight thousand dollars covers the aggregate earnings of the Indians for the season; in addition the health of the boys was toned up by out-of-door life, work, and an invigorating altitude.

Letters are frequent from Indians offering their services as carpenters for shipyard work, as tailors, and for other industrial activities. The Indian in khaki is a familiar visitor to the Indian Office. Among callers may be listed clerks, physicians, nurses, privates, non-commissioned and commissioned officers, Red Cross and Y. M. C. A. workers. Their high spirit and purpose and their desire to render service is immensely stimulating.

### NATIVE INDUSTRIES.

There has not been as much activity during the past year on the part of the Indians in native industries, due to the diversion of their efforts to agricultural and other pursuits in order to increase the production of food products, so necessary because of existing conditions growing out of the war.

The Navajo Indians have continued to make blankets, though not on such an extensive scale as heretofore. They have been selling their wool for use in the manufacture of clothing and other necessary articles rather than to weave it into native blankets.

There are apparently good markets for most of the better things made by the Indians, either through local trading establishments or the tourist trade; therefore no aggressive campaign was pursued during the year to widen the markets for products of this character.

The lace industry also is more or less inactive, due largely to the inability to get supplies and also to the fact that the Indian women are working in the fields in agricultural pursuits. It is believed this industry in future years will become an important one on many of the reservations, and every encouragement is given the Indians to utilize their spare moments in the making of salable articles to such extent as is now possible.

### ALLOTMENTS.

On the Gila River Reservation, Ariz., a special allotting agent is making additional irrigable allotments of 10 acres to each Indian.

Further allotments on the Umatilla Reservation, act of Congress approved March 2, 1917 (39 Stat. L., 969-986), to provide for 80 acres to each living Indian not theretofore allotted, is progressing in a very satisfactory manner. About one-half of the Indians entitled to allotment rights have made selections in the field.

Two hundred and seventy-seven allotments of irrigable land have been made to Indians on the Morongo Mission Reservation, Cal., under authority found in the act of March 2, 1917, but these selections have not been approved.

Reallotments have been made through changes in, and exchanges of, allotments under the acts of October 19, 1888 (25 Stat. L., 611-612), and March 3, 1909 (35 Stat. L., 781-784), on various reservations, more especially on the Cheyenne River Reservation, S. Dak., where many Indians are taking advantage of a better character of land for allotment purposes. Under the provisions of the acts of June 25, 1910 (36 Stat. L., 855-856), August 4, 1912 (37 Stat. L., 534), and June 30, 1913 (38 Stat. L., 94), 71 allotments were made and approved to the Fort Sill Apaches.

A list of the reservations, number of allotments approved during the year, and the number made in the field and not yet approved will be found in Table No. 26.

### PUBLIC DOMAIN ALLOTMENTS.

By departmental order of October 27, 1913, the making of allotments under the fourth section of the general allotment act of February 8, 1887 (24 Stat. L., 388), as amended, was suspended, pending the promulgation of new rules and regulations to govern applications made under said act. On April 15, 1918, these new rules and regulations were approved and work is now progressing thereunder.

### WHITE EARTH LITIGATION.

On the White Earth Reservation, Minn., a plan for the settlement of litigated cases has been agreed upon and this work is progressing in a highly satisfactory manner. These cases are the outgrowth of the act of June 21, 1906 (34 Stat., 353), removing restrictions as to adult mixed bloods. The act specifically declares that patents to adult mixed-blood Indians of the White Earth Reservation shall be construed to pass the title in fee simple, thus giving the Indians that may be so classified full control of their property. The work of determining just who are mixed bloods is being handled by a commission under the act of June 30, 1913 (38 Stat. L., 88), and upon the completion of the so-called "blood" roll, a basis will be obtained for proper disposition of pending cases.

## APPRAISEMENT AND REAPPRAISEMENT OF SURPLUS RESERVATION AREAS.

During the fiscal year many applications for appraisal and reappraisal of surplus reservation areas, otherwise subject to homestead disposition, have been handled. Authority for such work is found in the act of June 6, 1912 (37 Stat. L., 125).

### EXTENSION OF TRUST PERIODS.

The following table shows the tribes whose period of trust has been extended, number of allotments on each reservation, including public domain, the number so extended, date of expiration of trust, and length of extension:

Tribes.	Allotments.	Allotments extended.	Date trust period expires.	Ex- tended.
				Years.
Mission, Cal. (Potrero and Rincon bands).....	Tribal.	Tribal.	1917	10
Prairie band of Pottawatomies, Kans.....	115	110	1917	10
Mission, Cal. (Campo, Augustine, Cuyapipe, Inaja, Laguna, La Posta, Manzanita, Mesa Grande, Pala, Ramona, Santa Ysabel, Sycuan, Temecula, San Manuel bands).....	Tribal.	Tribal.	1918	10
Public domain.....	757	715	1918	1
Devils Lake, N. Dak. (Sioux).....	872	872	1918	10
Pawnee, Okla.....	820	820	1918	10
Onelda, Wis.....	1,501	35	1918	9
Tonkawas, Okla.....	73	27	1918	10

Authority for these extensions will be found in section 5 of the act of February 8, 1887 (24 Stat. L., 388), the act of June 21, 1906 (34 Stat. 326), and the act of March 2, 1917 (39 Stat., 969).

### SALE OF INDIAN LANDS.

During the fiscal year ended June 30, 1918, 662 pieces of allotted land, covering 74,126.24 acres, were sold for \$1,541,177.95 under the provisions of the noncompetent act; 438 pieces, covering 49,216.19 acres, were sold for \$1,174,854.97 under the inherited act. The average price received from both allotted and inherited Indian land is \$22 per acre. This is the largest average price that has ever been received from the sale of Indian land.

### FORESTRY.

Subsequent to the declaration of war against the German Imperial Government on April 6, 1917, a special effort has been made in the forestry branch of the Indian Service to place upon the market timber suitable for war purposes and to encourage in every practical way the production of those timber products that would be of spe-

cial advantage in supplying the military and industrial needs incident to the war.

Large sales of timber have been made on the Bad River, Flathead, Fort Apache, Klamath, Red Lake and Spokane Indian Reservations. While the timber cut from these reservations has not gone directly into military uses it has, and will, supply needs that arise through the diversion of other timber products to military purposes. Sales of lesser importance have also been made on the Coeur d'Alene, Jicarilla, and Leech Lake Reservations and the timber on allotments under the Nett Lake jurisdiction has been offered for sale.

At the large sawmill operated by the Government on the Menominee Indian Reservation, Wis., an especial effort has been made to produce such products as will be of special use in war industries. Arrangements have been made for the supplying of materials from that mill to a large shipbuilding corporation at Manitowoc, Wis., and other industrial plants. Lumber produced at these mills has also been offered to the Government for the construction of cantonments.

An effort has been made to develop production of special timber products for military purposes on reservations in western Washington and Oregon. On the Tulalip, Port Madison, Chehalis, Swinomish, and Skokomish Reservations sales of timber suitable for the manufacture of ship knees have been effected. Sales of timber suitable for aeroplane construction have been made from the Hoh, Siletz, and Quinalt Reservations, and arrangements completed for extensive operations in the production of aeroplane material on the two reservations last named.

An effort has been made to locate supplies of black walnut on Indian reservations in the Plains region and to arrange for the disposal of this timber in such manner as to assist the Government in the production of gunstocks and aeroplane propellers. Black walnut is being produced on the Sac and Fox, Osage, Pawnee, Kiowa, Winnebago, Eastern Cherokee and other reservations.

During the autumn of 1917 the eastern portion of the Spokane Indian Reservation was cruised and a contour map prepared. The information thus obtained was immediately used in the offering of about 275,000,000 feet of timber for sale.

Because of the enlistment and calling of technical men into the military forces of the United States and the difficulty of obtaining suitable employees for appraisalment and map work the making of valuation surveys has been practically suspended. During the summer and autumn of 1918 the timber will be cruised on allotments of the Siletz Reservation and on the nonreservation allotments in Oregon and northern California which are now under the jurisdiction of the Siletz and Greenville Indian Schools.

The general regulations and instructions for officers in charge of forests on Indian reservations, which were first approved on June 29, 1911, and modified on March 17, 1917, were revised and approved on February 5, 1918.

A new form of scale book and several other books and forms for the keeping of records of timber operations on Indian reservations were devised, printed, and distributed. The introduction of these forms will greatly promote efficiency and uniformity in timber records at agencies.

Detailed information regarding the stand of timber, the number of sawmills in operation and the amount of timber cut from each Indian reservation will be found in the Statistical Appendix to this report.

### ROADS AND BRIDGES.

The important place occupied by good roads in contributing to the industrial welfare and progress of the Indians has been further recognized during the year by the expenditure from the regular appropriations of thousands of dollars for Indian labor in the construction and repair of roads and bridges on the different reservations, besides specific appropriations of \$42,500 for two bridges across the Little Colorado and Canyon Diablo Rivers near the Leupp School, in Arizona; \$10,000 for road work on the Chippewa reservations in Minnesota; \$15,000 on the Gallup-Mesa Verde National Highway across the Navajo Reservation, in New Mexico; and \$25,000 for roads and bridges on the Shoshone Reservation in Wyoming.

### PURCHASE OF SUPPLIES.

Recognizing the unparalleled need for supplies of all kinds for the Army and Navy, the Indian Service has tried to fill its requirements from those lines which would least interfere with the proper conduct of the war. The service has closely cooperated with the United States Food and Fuel Administrations, their State officers, with the War Industries Board and subordinate branches, and with other organizations established for the purpose of regulating the production and use of materials and supplies. The rule requiring the use of flour substitutes has been strictly enforced. Woolen uniforms have been dispensed with for the time being, and requirements in other lines curtailed. Taking into consideration existing conditions affecting both the purchasing of supplies and their transportation to the points of consumption, the Indian Service has fared very well. The service was indeed gratified at the manner in which its coal supply was furnished and delivered during the past winter, but little or no trouble being experienced through delay in the delivery of coal even at the most remote points using that kind of

fuel. To aid in the conservation of coal, wood is being used more than heretofore and to the greatest extent possible. Prices in all lines naturally were abnormally high, but were in keeping with market conditions.

## NEW SYSTEM OF BOOKKEEPING AND ACCOUNTING.

The "fund accounting" feature of the new system of bookkeeping and accounting referred to in my last annual report (p. 54) was installed as of July 1, 1917, and disbursing officers at this time are generally familiar with its requirements and able to make fairly prompt and accurate reports of their financial operations thereunder. The "general accounting" feature was installed at most of the units at various times during the year, but some of the disbursing officers, for one reason and another, failed to get it in efficient working order, with the result that no reliable reports of cost by activities would be possible this year.

To aid in the installation and operation of the new system of bookkeeping and accounting, as well as to obtain a more effective checking of the accounts of disbursing officers in the field, three expert accountants were selected from the field clerical force and appointed as traveling auditors. The results obtained thus far have fully justified the plan.

## LEGISLATION.

Congress passed the Indian appropriation act on May 25, 1918, aggregating approximately \$11,000,000, for the usual appropriations for the current and contingent expenses of the Indian Service. Among the items of especial interest are the following:

Irrigation appropriations were made for specific projects by districts. These sums, together with appropriations for irrigation employees, surveys, and incidental expenses, total \$250,750. Congress provided, however, that no part of the appropriation was to be expended on any irrigation system or reclamation project for which public funds are or may be otherwise available. It also provided that the appropriations were to be available interchangeably for necessary expenses for damage by floods and other unforeseen accidents, the amount so interchanged not to exceed in the aggregate 10 per cent of the amount so appropriated.

On and after September 1, 1918, possession by a person in the Indian country where the introduction of liquor is or was prohibited by treaty or Federal statute shall be an offense and punishable in accordance with the acts of July 23, 1892 (27 Stat. L., 267), and January 30, 1897 (29 Stat. L., 506).

The annual per capita cost for schools was limited to not to exceed \$200 unless the attendance numbered less than 100 pupils, in which

case the per capita expenditure of not to exceed \$225 may be authorized. The number of pupils entitled, in any one school, to the per capita allowance shall be determined by taking the average attendance for the entire fiscal year and not any fractional part.

The sum of \$10,000 was appropriated for the construction of a fence along the international boundary line between Mexico and the Papago Indian Reservation in Arizona.

Hereafter no Indian reservations shall be created, nor shall any additions be made to any heretofore created, within the limits of the States of Arizona and New Mexico, except by act of Congress.

The Florida Seminole Indians are given an appropriation of \$10,000 for civilization and education, including the construction and equipment of necessary buildings on lands set aside by the State of Florida, by act of its legislature, for the perpetual use of said Indians.

An appropriation of \$75,000 is made for the relief of distress among the full-blood Choctaw Indians of Mississippi. This is for the purpose of payment for employees, the establishment and maintenance of schools, purchase of lands, encouragement of industry and self-support, and purchase of seed and agricultural implements.

The withdrawal from the Treasury of the United States of the sum of \$200,000 of the tribal funds on deposit to the credit of the Crow Indians in the State of Montana is authorized for the purpose of necessary improvements to the irrigation systems in the Big Horn Valley on that reservation.

The sum of \$25,000 is appropriated for continuing work on the Indian highway extending from Mesa Verde National Park to Gallup, N. Mex.

The proviso to section 1 of the act of March 4, 1907 (34 Stat. L., 1413), relating to the expenditure of the proceeds derived from the sale of timber on the Jicarilla Reservation was amended so as to authorize the expenditure of said proceeds, with the consent of the allottees whose property is appropriated, in the purchase of live stock, seeds, agricultural equipment, and for other community or individual purposes beneficial to the Indians.

The sum of \$8,000 is appropriated for the construction of a bridge across the Oconalufy River near the Indian School at Cherokee, N. C.

The act of May 28, 1908 (35 Stat. L., 460), and the act of February 14, 1913 (37 Stat. L., 675), was amended so as to authorize the per capita distribution to the Standing Rock Indians, or the use of such moneys arising under the acts mentioned for their benefit.

Receipts from leasing oil, gas, and other mineral lands of the Osage Indians until the same are paid out as provided by existing law, may be deposited in national or State banks in Oklahoma.

The construction of a fire-proof office building for the Osage Agency is authorized.

Allottees of the Osage Nation may change the present designation of homesteads to an equal area of unincumbered surplus lands under regulations to be prescribed.

The Five Civilized Tribes appropriation contains a limitation prohibiting the use of the appropriation for forwarding to the Secretary of the Interior undisputed claims to be paid from individual moneys of restricted allottees or their heirs, or uncontested agricultural and mineral leases, excluding oil and gas leases. An appeal is, however, authorized.

A per capita payment of not to exceed \$200 to the Choctaw and Chickasaw Indians is provided for.

Not to exceed \$100 per capita is authorized to be paid to the Seminole Indians out of their funds.

The distribution of Creek funds, except \$150,000, so as to equalize the pro rata share received by each member of said tribe in either land or money, is authorized.

The sale to the State of Oklahoma for a game preserve of certain lands within the Choctaw and Chickasaw Nations is authorized.

All claims against the Cherokee Nation are to be filed not later than one year after the approval of the act.

The Court of Claims is authorized to adjudicate the claims of J. F. McMurray, provided adjustment is not made by mutual agreement within 60 days after the approval of the act.

The sum of \$400,000, reimbursable, is appropriated for encouraging industry and self-support among the Klamath Indians in Oregon.

The sum of \$8,000 is appropriated for the education of the Alabama and Coushatta Indians located in Polk County, Tex., and for an investigation to be made as to the necessity and advisability of purchasing land for said Indians.

An additional sum of \$500,000 is appropriated for the Wahpeto irrigation and drainage system in the State of Washington.

The withdrawal of \$300,000 of the tribal funds of the Menominee Indians in Wisconsin for their benefit is authorized.

The expenditure of tribal funds, not exceeding \$2,500,000 during the fiscal year ending June 30, 1919, in addition to such sums as may be required for equalization of allotments, education of Indian children, per capita and other payments to Indians, and expenditures for the Five Civilized Tribes, in accordance with existing law, is authorized.

The withdrawal from the Treasury of the United States of community funds of any Indian tribe which are susceptible of segregation, so as to credit an equal share to each and every recognized member of the tribe, except those whose shares have already been withdrawn, and the deposit of such funds in banks to be selected, subject to withdrawal for payment to the individual owners, is authorized.



## COURT DECISIONS.

There were a number of very important decisions rendered by the courts on Indian matters during the past year. The most important decision was that of the Supreme Court of the United States in the case of *Brader v. James*, which was decided March 4, 1918, wherein the court held that the act of 1906, requiring conveyances by full-blood heirs of members of the Five Civilized Tribes be approved by the Secretary of the Interior was constitutional, even though the lands descended prior to the passage of the act. This was based on the theory that Congress has power to reimpose restrictions on lands allotted to Indians and is the first definite holding of the Supreme Court on this point.

The same court, on November 5, 1917, decided the case of the *United States v. Hiram Chase*. The decision of the court was to the effect that assignments to individual members of the Omaha tribe under Article IV of the treaty of March 6, 1865 (14 Stat. L., 667), passed only the Indian or tribal right to occupancy; did not pass title in fee, and was not an insurmountable obstacle to the allotment of these lands under the act of August 7, 1882 (22 Stat. L., 341).

In the case of *United States v. Soldana* the Supreme Court rules that the station platform of the Chicago, Burlington & Quincy Railroad at Crow Agency, Mont., is Indian country within the provisions of the act of 1897 forbidding the introduction of liquor into the Indian country.

In *Lane v. Morrison* the decision of the court was to the effect that the joint resolution of March 4, 1915, continuing for another year the appropriations for current and contingent expenses of the Indian Department and for fulfilling treaty stipulations, included the appropriation for promoting civilization and self-support among the Minnesota Chippewa Indians.

The title to the Spokane Indian Reservation was quieted in the Indians of that reservation by the decision of the Supreme Court in *Northern Pacific Railway v. Emma A. Wismer*. It was held by the Supreme Court that the reservation was legally established and the lands removed beyond the scope of the grant to the railroad.

In *Egan v. McDonald* the Supreme Court held that the heirs of a deceased Indian had power to convey trust lands with the approval of the Secretary of the Interior under the act of May 27, 1902 (32 Stat. L., 275), and the approval of the conveyance did not require an antecedent finding by a Federal court as to heirs.

There was also an important decision by the Supreme Court of the District of Columbia in which an Osage Indian asked the court to compel payment of moneys which were part of the payment to

the Osages withheld under the provisions of section 2087, Revised Statutes, which reads:

No annuities, or moneys, or goods shall be paid or distributed to Indians while they are under the influence of any description of intoxicating liquor, nor while there are good and sufficient reasons leading the officers or agents, whose duty it may be to make such payments or distribution, to believe that there is any species of intoxicating liquor within convenient reach of the Indians, nor until the chiefs and headmen of the tribe shall have pledged themselves to use all their influence and to make all proper exertions to prevent the introduction and sale of such liquor in their country.

The court dismissed the case.

## SUPPRESSION OF THE LIQUOR TRAFFIC.

Recent Federal and State legislation prohibiting the sale of intoxicating liquors either at large or in war zone districts has been so progressive and effective as to substantially improve conditions throughout the entire country.

The item in the Indian appropriation act for the fiscal year 1919, providing that on and after September 1, 1918, possession by a person of intoxicating liquor in Indian country, where its introduction is or was prohibited by treaty or Federal statute, shall, in itself, constitute an offense punishable as provided in previous statutory enactments, has made possible law enforcement certain to be far-reaching and exceedingly helpful in securing convictions of violators who have frequently theretofore escaped punishment.

While these new conditions have already resulted in better control of the liquor traffic and a marked decrease in the violations of the law, it is apparent that continuous and uncompromising vigilance will be necessary to insure the accomplishment of such results as, with our present legal weapons, are reasonably to be expected.

The fiscal year just closed has been a very active one. As in previous years, bootleggers have been the ever-present, persistent, and malicious enemy of the Indian. Of all men they, as a class, are the most despicable. They have no respect for God or man. There is no legitimate place for bootleggers anywhere on earth. They are without a defender.

Public sentiment was at one time considerably divided in Minnesota as to the wisdom and propriety of the Indian Office activities in connection with the enforcement of the provisions of the Chippewa treaty of 1855 prohibiting the introduction and sale of liquor into a large part of the State covered by this treaty. The change in sentiment in Minnesota, among those who for business reasons or otherwise were slow to accept this new condition, has amounted to a revolution, and it is gratifying that now there is practically unanimous support of our activities in harmony with the decision of the

Supreme Court of the United States, which on June 12, 1914, held that the Chippewa treaty of 1855 was in full force and effect.

Our operations in Minnesota, and particularly in the treaty territory, have continued unabated. While several counties have recently voted dry, and the Public Safety Commission has ordered other places to cease traffic in intoxicants, there is much aggressive work to be done.

The case wherein the John Gund Brewing Co. sought to compel the Great Northern Railway Co. to accept shipments of beer, etc., to persons residing within the treaty territory in Minnesota, referred to in my report of last year, was disposed of by the United States Supreme Court on March 18, 1918, favorably to the contention of the Government and against the contention of the Brewing Co.

A case involving the act of May 18, 1916, providing that possession by a person of intoxicating liquors in the country where introduction is prohibited by treaty or Federal statute shall be *prima facie* evidence of unlawful introduction, was tried in the United States court for the district of Minnesota and the law upheld. The convicted defendant appealed the case to the United States Circuit Court of Appeals on a writ of error, where the judgment of the lower court, at the December term, 1917, was sustained.

The enforcement difficulties in Minnesota were perhaps greater than in any other State than Oklahoma, although there have been continuous and varying problems everywhere, probably most acute in Wisconsin and Montana. However, Montana will go dry at the close of this calendar year and a great improvement there is confidently expected. In Oklahoma liquor conditions have been very bad and are still far from satisfactory.

The practice of loading liquors into big automobiles and driving at high speed into Indian country will probably decrease in popularity by reason of the legislation extending the provisions of section 2140 of the Revised Statutes, referred to in my last report. In a case under this section in the United States court for the eastern district of Oklahoma, it was held that the mortgagee had no rights, that the act of March 2, 1918, removed the ownership question entirely. The automobile in that case was ordered confiscated and sold. Many automobiles used in attempting to outwit the law have fallen into the hands of our liquor suppression officers and suffered a similar fate.

Seizure of conveyances does not stop with automobiles and wagons. Illegal shipments of liquor from Joplin, Mo., into the eastern district of Oklahoma are a source of vexatious trouble. Information reached our liquor-suppression officers that railroad trainmen were involved in an introduction conspiracy. On January 4, 1918, it was learned that a large quantity of liquor had been secreted in a

freight car en route for Wagoner, Okla., with knowledge of the train crew. Upon investigation the liquor was discovered in a sealed box car of crushed ore. On top of the ore were 41 sacks containing 984 quarts of whiskey. In a coal car of the same train was found a noted bootlegger who was arrested. The train engine and the car which contained the liquor were seized as conveyances under section 2140 as amended.

Early in my administration of Indian affairs I discovered the previous-to-that-time unenforced Federal statute, section 2087, which provides that no annuities or moneys or goods shall be paid or distributed to Indians while they are under the influence of any description of intoxicating liquor, nor while there are good and sufficient reasons for those whose duty it may be to make such payments or distribution, to believe that there is any species of intoxicating liquor within convenient reach of the Indians.

This law seemed to me to be a certain and speedy remedy for improving the wicked and debauched condition prevailing where Indians were receiving payments, and thereafter I proceeded to exercise the power so conferred.

At its first enforcement, now more than four years ago, it became apparent that the white citizens of the community, for business reasons or otherwise, who either participated in or condoned the traffic in liquor in violation of law, were quick to respond and give cooperation to the Indian Bureau enforcement officers when money payments were withheld from the channels of trade.

About two years since I successfully used this legal weapon by withholding the payment of more than a million dollars from the Osages, in Oklahoma, and for a considerable time thereafter sobriety among these Indians was so noticeable that the locality thereabouts was regarded as dry country.

At the beginning of the year 1918 information reached me that the bootlegger was again continuing his nefarious business with increasing activity in Osage County. Just previous to the quarterly payment ordinarily due about the first of March, I was dependably advised that the sale of liquor had increased until conditions there were worse than ever before, that many who had previously given support to the apprehension and conviction of those engaged in illicit traffic in liquor were by their inactivity or approval making possible a defiance of law not confined to the criminal violator but indirectly profited in by the venders of merchandise and the unscrupulous politician. The situation in Osage County at this time was revolting, degrading, and in every way destructive of the morals, the industry, and the very life of the Osage Indians.

For several months every other means within my reach had been exercised without satisfactory results, consequently on March 2, 1918,

I directed the superintendent at Pawhuska to withhold payments of all royalties and bonus money to Indians residing in Osage County until further advised. This order suspended the payment of \$1,660,600. Pandemonium soon reigned at Pawhuska and vicinity. A "hurry-up call" was made for a meeting, which was attended by something like 500 representative citizens and about \$6,000 was subscribed to assist in law enforcement, immediately after which an appeal was made to me to permit the payment. My answer was this telegram to Superintendent Wright:

Liquor conditions Osage Nation exceedingly bad and indefensible. Enforcement as formerly promised by local authorities has been spasmodic and temporary. I shall not be satisfied with less than demonstration of absolute good faith. This order should be enforced in such a way as to make certain that it will not be violated in the future. Liquor has been the curse of these Indians. Its results are intolerable and vicious.

A personal visit and investigation further convinced me that the suspension order was fully justified and that it should not then be revoked. Strenuous appeals were made and political influence was not overlooked, but we insisted that the payment would not be made, nor would the next one, when due, unless public sentiment was so aroused that enforcement committees and local officials would earnestly join in our efforts to drive liquor from within the reach of the Osage Indians.

As an indication of the situation the following from an article, published in the Tulsa Democrat of March 31, 1918, will be of interest:

Up in the Osage a new war is being waged. Osage County really has nothing on Germany. It is fighting for its existence and not even calling upon God to take notice. But for the great world war which affects everybody, though its front is thousands of miles away, the present war in Osage County would attract Nation-wide attention. But even as things are the war which means the financial life or death of Osage County is getting the lion's share of attention just now throughout the biggest county in Oklahoma, the world war having been backed off the boards for the time.

Osage County is making war upon the bootleggers. Heretofore the county has done more or less desultory fighting against that enemy of order and decency, but that was only skirmishing. It was a matter of getting Cato Sells, Commissioner of Indian Affairs, to release suspended quarterly and other payments on assurance that the bootleggers and their business has been driven out.

Now Osage County is at war in earnest. John Barleycorn, high chief commander of the enemy's forces, is well aware of this fact. If the bootleggers are not defeated, which means driven out utterly or annihilated physically, Osage County will lose its proud position as the home of the richest nation of people on earth, the Osage Indians.

The die is cast, and the issue is joined. The fight is to the finish. That it is not going to be the finish of Osage County's prosperity is a foregone conclusion, and for that very reason it is permitted this war correspondent to predict ultimate victory for the allied forces of Osage County, including the whites and the Indians.

No bootlegger peace will be accepted. The peace must be a respectable citizens' peace. Bootlegging must be uprooted and overthrown and cast out and done for. Nothing else will suffice. The Great White Father at Washington has said it. Through the mouth of his general manager of all the Government-ward Indians in the United States, Cato Sells, Commissioner of Indian Affairs, he has said it; and he means it.

If you doubt that, ask Cato Sells if Uncle Sam doesn't mean what he says—through Mr. Sells officially—to wit:

"The bootlegger must go and bootlegging must cease before another dollar of Osage Indian money is released for expenditure in Osage County."

What that means may be explained in a few short words. It means that approximately \$6,000,000 a year, including bonuses on the sale of oil lands and the four quarterly payments of oil and gas royalties, these \$6,000,000 being almost the only visible support of Osage County, will be held out of payment until Commissioner Sells has actual and visible proof that Osage County has conquered and exterminated the bootleggers; and that is the war in its first lap up in the Osage, just above Tulsa. \* \* \*

Pawhuska is a beautiful little city of about 5,000 people, the county seat of Osage County. It has grown from a small Indian trading post in the past 10 years since the Osages got their allotments and waxed opulent on oil and gas royalties. It is the Osage Indian money that has made Pawhuska. \* \* \*

Save as to bootlegging, the people of Osage County are law-abiding. Of course reservation must be made for the offenses incident to bootlegging. The average of intelligence is high. There are good schools, both for whites and for Indians. Osage citizenry is by no means of the wild and woolly sort. It is a composite of the all-American type. Some of the Osages are highly educated. They have been to Carlisle and other Indian schools elsewhere. In the Osage school on the terrace at Pawhuska are many Indian children of both sexes. J. George Wright, superintendent of this school, is the local Indian agent. It is from his office that the checks are distributed to the Indians. Disbursing Agent Wise signs checks on the United States Treasury and they go to the 2,229 Osages each quarter, except when suspended, as at present. It is a considerable job that Mr. Wise has.

Though a town of but 5,000 people, Pawhuska had until recently 57 licensed jitneys. Citizens who wish to minimize the impression as to the prevalence of bootlegging will tell you, perhaps, that the jitneys do a big business carrying Indians to and from the Indian village and between Pawhuska and other towns in the county. Those who admit that bootlegging is jitneyized will tell you that most of the "jits" are subsidized by the wholesalers in booze, who farm the stuff out to the jitney drivers, who in their turn sell it to the Indians. The jitneys get \$1 a head for carrying Indians between Pawhuska and the village—2 miles—50 cents a mile.

And here is what an authoritative official told a representative of the Democrat, when recently at Pawhuska:

"These jitneys will bring an Indian in from the village and take him back home, charge \$2, and on the trip the driver will sell the Indian a quart of whisky, price to Indians, \$12; total \$14 for the quart, including the ride that is necessary to get the booze placed. An Indian, especially a booze-fighting Indian, never worries about the price. If he has the money, and he usually has for some time after the quarterly payment, he will give up gracefully. If he is broke, as he usually is before his next hand-out from the Government, he finds it easy to borrow money at hugely usurious rates. Anyhow, he gets the booze, gets drunk, gets into trouble, and raises hades."

It is said that booze is brought into Osage County in high-powered automobiles bought and fitted especially for the business, and that whisky caches are almost as common as gopher holes. Queer tales are told of the ingenuity displayed by the bootleggers in concealing their stocks. Near Pawhuska is an old Indian graveyard. A certain chief, gathered to his fathers many years ago, is buried in a grave of architecture superior to the common run. The grave is walled up and covered with rocks, making it a sort of vault.

One of the officers on the scent of a booze cache trailed a jitney to the graveyard. The officer secreted himself and watched the jitney man remove a flat slab of stone from one corner of the grave and take out some bottles. He pounced upon the fellow. The old chief's grave, like the tomb of the kings of Egypt, the great pyramid, was a hiding place for treasure, though in this case the treasure was booze.

In the same issue of the Tulsa Democrat—that is to say, March 31 last—appeared the following statement made by me:

I spent Wednesday at Pawhuska in conference with agency officials, enforcement officers, white citizens, and representative Osage Indians, concerning liquor conditions in Osage County.

The representations heretofore made to me in this connection are in no wise exaggerated. As a result of my interviews it is my conclusion that liquor conditions there are not only bad but without precedent. However, it is gratifying that local business men are cooperating with Federal authorities and Superintendent Wright in the effort to clean up and drive the bootlegger out of the locality.

I was also greatly pleased to find numerous Indians disposed to cooperate in the enforcement of the law for the welfare of their own people, and especially the younger men, who are more addicted to the liquor habit than the older Indians.

There is a promising outlook, but I shall not be satisfied until there is effective performance. The law must be enforced permanently, and the payments will not be made until such a condition is apparent.

During the year ending December 31, 1917, there was disbursed through the agency office to Osage Indians \$6,290,087, or an average of \$3,170 to each man, woman, and child.

For the past two years the agency office has restricted payments to about 50 Indians, who are most seriously and persistently addicted to the liquor habit, and the records show that on December 31, 1917, such Indians had an aggregate of \$58,800 in banks to their credit, in addition to which considerably over \$100,000 was expended in payments of debts previously contracted by them, erection of permanent improvements, and the purchase of implements and other necessities. When the payments to these Indians were withheld they were largely in debt and did not have a dollar. They are now practically free from debt and are owners of property which they would not otherwise have acquired had their payments been made to them unrestricted. This money was expended for them as they desired, under supervision; consequently, they were unable to use any of it for the purchase of whisky.

The amount of the oil payment bonus suspended is \$1,660,600. The regular quarterly payment of oil and gas royalties and interest on trust funds, aggregating something over \$1,200,000, is also being withheld under this same order, or a total amount of \$2,860,600.

On April 22, I wrote the following letter to Superintendent Wright, at which time for reasons therein stated, I authorized the payment of \$1,660,600, the same being the amount first withheld, and continued the order as to the second payment in the sum of \$1,200,000:

Information before me represents that liquor conditions in Osage County have improved since the order was made withholding payments and, while they are still unsatisfactory, I think we are justified in making the bonus payment, largely because of the opportunity it will afford for the purchase of liberty loan bonds of the third issue, the time for subscribing to which will expire May 6.

I wish it understood that in coming to all conclusions in this connection I have been guided only by the earnest desire to secure the best results obtainable for all concerned.

Before making the order I was reliably informed, and a personal visit there has confirmed my opinion, that the Indians have and are suffering irreparably from the introduction and sale of liquor in Osage County; that the extent to which it has been carried on, together with other evils that follow, has brought about the permanent injury of numerous men, women, boys, and girls of the Osage tribe. To permit its continuance when a lawful remedy is available would be a serious reflection not only

upon the entire community and the Federal officers but upon every man holding a local office in any manner associated with the betterment of conditions.

The Federal authorities are sympathetic with our efforts and I have reason to believe that some of the local officers are giving earnest cooperation, but this is not true of all public officers in Osage County. It is not sufficient to say that the best citizens thereabouts want the law enforced or that they have contributed their money to an enforcement fund. More than this is required to demonstrate good faith. If an officer is doing less than his duty public sentiment should retire him.

It is folly to say that the bootlegger can not be driven out of Osage County. It can and should be done. If the Indians are to have the protection the law contemplates and which I regard as absolutely necessary for their welfare and happiness, it must be done.

Make the bonus payment now, encourage the purchase of liberty loan bonds, and await the action of the officers and the public to so change conditions there as to dependably indicate permanent relief from the degrading and destructive effects of the liquor traffic.

The efforts being made by some of the citizens and part of the officers are gratifying and promising.

Please keep me advised as to the situation following the bonus payment, to the end that while we are firm in the performance of our duties we may in no way fail to be just.

Thereafter the withholding order of the \$1,200,000 continued until I made another visit to Pawhuska, when, after a conference with Superintendent Wright, a trip to several towns of the county and interviews with numerous white citizens and representative Indians, I authorized the \$1,200,000 payment and gave out the following interview, which appeared in the Tulsa World, of May 9, 1918:

I am so much concerned in doing the very right thing in connection with the liquor situation in Osage County, with especial reference to the suspension of payments to the Indians, that I have made another trip from Washington to Pawhuska that I might personally acquire further dependable information upon which to base action.

I am just returning from Pawhuska en route back to Washington, having spent Tuesday and Wednesday with Superintendent Wright and others. While there I made close inquiry, with the result that I am convinced that the liquor situation has been greatly improved since early in March, when I suspended the first, and a short time thereafter the second, payment.

Some time ago I directed the payment of bonus money, amounting to \$1,600,000, chiefly for the reason that I did not want to interfere with the purchase of liberty loan bonds, and to-day I have authorized the quarterly payment due March 1 of \$1,200,000. There will be another payment due about the first of June. I am not yet satisfied with the liquor situation there, but it is very much better. A large part of the white people and the Indians are apparently acting in good faith in their efforts to suppress the liquor traffic. However, the bootleggers still remain thereabouts, and I am not certain that the experience of two years ago will not be repeated. When I suspended a payment at that time there were many evidences of a sincere intention to permanently enforce the law, but it was not long until conditions were again bad, and they continued to grow worse until immediately previous to the last suspension of payments they were exceedingly bad, worse than they had ever been before.

There were "wholesale bootleggers" and "retail bootleggers." The wholesalers were defiant and apparently proud of their business. The retailers were numerous, and as low down in the scale of life as it is possible for men to become. However,



they were not less avaricious, vicious, or criminal than those engaged in the wholesale of whisky.

While there are many high-class white men and Indians in Osage County, there is a considerable element there that has no regard for law or order. Their chief purpose in life seems to be to get the Indian's money. They are especially active immediately following each payment.

I would be less than fair if I failed to say that some of the county and city officials are earnestly sympathetic with our efforts to clean up conditions. This is especially so of Mayor Carroll, of Pawhuska, recently elected, and the county attorney's office, but it is equally true that this does not apply to all local officials, some of whom are at least indifferent, with many indications that they are in sympathy with the law-breakers.

Altogether the Osage Indians have suffered irreparably, and it will not be possible to bring about an entirely satisfactory solution of this situation until there is a much stronger sentiment than now exists for full cooperation and an earnest, united effort against those who introduce and sell liquor. It can only come about when every agency, private and public, indicates unmistakably by action as well as words that they are determined to make it impossible for the bootlegger and other violators of the law to remain in Osage County.

I have now ordered the last payment due paid, and it will be paid immediately. There will soon be another payment due, which, if conditions justify, I shall withhold.

I am not going to stop this fight until the law is vindicated by good faith enforcement. We are now reenforced in this, that the Supreme Court of the District of Columbia has, within the last 10 days, denied a writ of mandamus compelling payment holding that section 2087 of the Revised Statutes is in full force and effect, the same being the law under which the Osage payments were suspended. The pending Indian bill contains a clause, which has passed the Senate and House, making the possession of liquor in Indian country a crime, so that hereafter we will not only have the adjudicated fact that section 2087 is operative, but the additional statute which makes it easy and certain to convict every person found in Indian country with liquor in his possession. We are going to use both of these legal weapons, and there will be no compromise.

These payments have been ordered made because we believe conditions warrant our action. We are not disposed to discredit those who proclaim their intention to permanently enforce the law. If they do, the payments will be regularly made. If they do not, they will be suspended, and the fight will be kept up until there is such a condition of enforcement as is contemplated by the law.

I have but one purpose in my action in this connection, and that is to do my full duty. I have no satisfaction in the exercise of authority other than as it may be the instrument of good. I do not want to unnecessarily embarrass anyone, and shall not, but I am fixed in my determination to save the Osage Indians from the inevitable wreck awaiting them if they are not rescued from the licentious conduct of those who would push them on in idleness, debauchery, and crime, and to this end I invite the cooperation and support of every good citizen in Osage County and elsewhere in Oklahoma.

Thus ended a victory for law and order, unequaled in our five years' struggle for enforcement of statutes prohibiting the sale of liquor to Indians and in Indian country. Its results have not only been wholesome in Osage County but throughout Oklahoma and everywhere in the 26 States where Indians reside.

With the decision of Judge Stafford declaring section 2087 in full force and effect, and the enactment by the Sixty-fifth Congress making possession of liquor in Indian country a crime without further

evidence of guilt, the outlook for rapid and permanent improvement in liquor conditions is altogether gratifying, provided that when convictions are secured the penalties imposed by the court are enforced and that pardons are not granted except upon newly discovered evidence or for reasons fully justifying clemency.

It was my experience as a State's attorney, and afterwards as a Federal prosecuting attorney, and now when writing opinions requested of me as Commissioner of Indian Affairs in connection with applications to the President for pardons, that it is an exception to the rule when a defendant who has been convicted is not guilty. Conditions sometimes arise when pardons should be granted, and I believe that every case presented should be judicial-mindedly reviewed and courageously acted upon, whether it be for or against the applicant or whatever the nature of the crime. However, I am opposed to the granting of pardons on popular petition for sentimental reasons or because of political or other influence.

I do not covet, neither do I shirk, the responsibility of taking a position on applications for pardon in cases of conviction for violations of law in Indian country, and yet I would be less than frank if I failed to say that this duty has been one of the most trying I have been called upon to perform.

Notable among the many pardon applications I have reviewed and upon which I have written opinions is the case in which R. K. Warren, of Hugo, Okla., was convicted in the United States court for violation of the Federal liquor laws. In commenting upon his application for pardon and its denial by President Wilson, the American Issue of August 17, 1918, said:

Warren was arrested by an Indian Bureau suppression officer, William R. Houston, son of Gen. Sam Houston, when carrying several hundred bottles of beer in an automobile near the hour of midnight from Texas to Hugo, Okla., for use at a social gathering of young men. At the same time he was prosecuting attorney for the county in which he was delivering the beer and was then a candidate for the legislature. He was elected to the legislature and soon thereafter convicted in the Federal court, from which he appealed to the Supreme Court of the United States, where the judgment against him was affirmed.

The members of the legislature, without a dissenting vote, petitioned the President to pardon him. Then followed an array of appeals such as have never been presented in favor of any violator of the liquor laws.

Fortunately for the friends of law and order, the Commissioner of Indian Affairs, Cato Sells, is always requested to give the President his opinion as to whether or not applications for pardon for crimes committed in Indian country should be granted. Commissioner Sells courageously and vigorously opposed granting the pardon, taking the position that as prosecuting attorney, sworn to enforce the law, Warren was even more guilty than a private citizen committing the same offense and that there was no possible justification for the mitigation of his sentence. The recommendation of the Commissioner was followed by the President instead of the multitude that came to him in behalf of Mr. Warren.

This incident is encouraging and inspiring to officers and citizens who are fighting for law enforcement. It gives a stronger confidence in the integrity and efficiency of our Government and its officers. It is in harmony with that splendid declaration of the President concerning riots and mobs.

Another case typical of many more is the application of H. C. Badger, a prominent farmer, stock raiser, and business man, who was convicted of introducing liquor into Indian country and for whose pardon numerous business men and leading citizens, including many public officials, petitioned. Concerning which case, on April 17, 1918, I wrote the following letter to the pardon attorney of the Department of Justice, which was submitted to the President:

I have your letter of March 25, inclosing the application of H. C. Badger for executive clemency, together with a number of testimonials, and, complying with your request for recommendation, submit the following:

I have given this case close personal attention and have read the entire file in which I find two undisputed facts: First, that defendant Badger did at the time charged ship from Kansas City, Mo., to Keifer, Okla., the latter place being in Indian country, 24 quarts of whisky and 2 quarts of wine, the same being conveyed in a trunk checked by him between the two points named, and that at the same time he carried with him in a grip 1 quart of whisky. Second, that he is a man of wealth and influence in the community where he resides, at or near Keifer.

There can be but one conclusion—that he is guilty of the offense charged, and seeks mitigation for his offense because of his potential relations.

To my mind the showing in his behalf emphasizes his crime. He is presumed to know the law and because of his apparent intelligence he certainly did know both the law and its consequences. To grant him immunity under the circumstances would be to announce a doctrine incompatible with every principle of just law enforcement. It would be unmistakable evidence of willingness to determine punishment upon the element of wealth and power rather than justice, which never can be justified.

Position or influence should not be a factor in the enforcement of the law against the introduction or sale of intoxicating liquors to Indians or in Indian country. It is an axiomatic and good principle that all men should stand equal before the law. In fact, the institutions of our country are in no way better reflected than when this idea is faithfully executed.

My conclusion is that to pardon Badger would strongly tend to destroy confidence in those who have immediately to do with the enforcement of the law.

Altogether, I am of the opinion that he should not be pardoned and that his sentence should be enforced.

Badger's application for pardon was denied by President Wilson.

### SEMINOLES OF FLORIDA.

As a basis to the working out of a constructive plan for their betterment I detailed one of the most experienced Indian Service field men, who is himself of Indian blood, to act in the capacity of superintendent of the Seminoles of Florida, with instructions to make a close investigation of conditions there.

My attitude toward the Seminoles and other neglected tribes and remnants of tribes of Indians is indicated in the following letter

addressed by me to this field representative preliminary to his activities in Florida:

Complying with our verbal understanding, you are directed to proceed to Florida for work in connection with the Seminole Indians, practically assuming the relation to them of superintendent, where you will remain until you receive orders otherwise.

I am sure you understand and appreciate my great interest in the Florida Seminoles. I feel that they have not been given the encouragement to which they are entitled, and that for this and other reasons they have not responded to the comparatively few attentions extended them by the Government.

I am persuaded that human sympathy is the first and most important element in our efforts to induce Indians to accept educational and industrial opportunities, and that this is particularly true of the Seminoles of Florida. I greatly desire them to realize our interest in their welfare, and I believe that your experience and the fact that you are an Indian will enable you to accomplish the betterments necessarily involved in their advancement. For this reason I have requested you to undertake bringing about a cooperative and constructive attitude among these people.

It is my intention to visit the several small tribes and bands of Indians in the Southern States, when I will hope to spend enough time in each locality to secure the first-hand information which will enable me to develop a helpful policy for the heretofore overlooked Seminoles of Florida, Choctaws of Mississippi, Chitimachas of Louisiana, and Alabama Indians of Texas, as I have for other neglected tribes, notably the Papago in Arizona and the Rocky Boys in Montana. I am aroused to the righteousness of doing something for the forgotten Indian, encouraging without spoiling him.

Reports received and an interview with the acting superintendent outlining plans for extending educational and industrial aid to the Seminoles along practical lines are in part being administratively executed, and it is my purpose, with this information, to make a personal visit among these Indians in the immediate future, when a further and definite program will be put in operation.

### MISSISSIPPI CHOCTAWS.

The sixty-fifth Congress appropriated \$75,000 to provide school facilities and other relief for the Choctaws in Mississippi. As a preliminary to the expenditure of this money, and that I might be fortified with first-hand information, I made a personal visit to Mississippi, where I traveled overland among these Indians, principally in Neshoba, Leake, Kemper, Newton, and Scott Counties. I saw them in their homes, at work, on their sick beds, and in their varied relationships of life.

Practically all of the Mississippi Choctaws are full-bloods. Very few own their homes. They are almost entirely farm laborers or share croppers. They are industrious, honest, and necessarily frugal. Most of them barely exist, and some suffer from want of the necessities of life and medical aid. In many of the homes visited by me there was conspicuous evidence of pitiable poverty. I discovered families with from three to five children, of proper age, not one of whom

had spent a day of their life in school. With very few exceptions they indicated willingness to go to school, as did their parents to send them. Several young Choctaw boys and girls expressed an ardent desire for an education.

Generally speaking, the white citizens thereabouts showed a marked interest in the welfare of the Choctaws, and many of them were warmly sympathetic. However, there were a few exceptions, confined to those who selfishly profit from their labor.

While in Mississippi I visited the State Agricultural College at Starkville and the Industrial School for Girls at Columbus. They are splendid institutions. Indeed, I was surprised at the extent and the results of their work. The girls' school is the oldest and one of the best of its kind. I think it may be fairly said of the State Agricultural College of Mississippi that it ranks among the first half dozen similar schools in the United States. Its accomplishments in modern agriculture, animal industry, and kindred subjects reflect great credit upon the State and are an unmistakable demonstration of the results to be secured in the practical application of progressive farming and stock-raising methods throughout the South. The president and members of the faculty of each of these institutions assured me of their great interest in the movement to better the condition of the Choctaw Indians and volunteered active cooperation.

Starkville and Columbus are located within a radius of about 75 miles of the great body of these Indians, consequently the assistance from the Agricultural College and Industrial School is readily accessible.

With the information secured on this trip I am working out the details of an administrative plan from which I expect constructive and gratifying results.

In compliance with the congressional enactment, a special agent, who is also a physician, and who has had large experience among Indians, has been appointed. He has commenced his supervisory work, with headquarters at Philadelphia, Miss., and I am confident that with this and other comparatively small appropriations we will be able to relieve the deplorable condition now existing among these Indians.

Notwithstanding a heroic effort on the part of the Senators and Representatives from Mississippi and their other friends in Congress, it is apparent that the Oklahoma rolls have been finally closed against the Mississippi Choctaws, and that their future is in Mississippi, where, everything considered, I am persuaded that these deserving people should receive kind, prompt, and substantial consideration from the Government.

## ALABAMA INDIANS IN TEXAS.

In carrying out the direction of Congress, the Secretary of the Interior detailed one of his inspectors to visit the Alabama Indians located in Polk County, Tex. This investigation has been made and the report will be presented to the next Congress.

These Indians are in the same class as the Seminoles of Florida and the Choctaws of Mississippi, and I anticipate will be found worthy of serious and friendly consideration.

The following editorial from the Springfield (Mass.) Republican may be of interest in this connection:

**"THE LOST TRIBES" OF THE SOUTH RECEIVING ATTENTION OF COMMISSIONER SELLS.**

The name of the Interior Department implies that it is busied with home problems, and so it is little talked about in war time. It embraces, among many other things, the Office of Indian Affairs, with Commissioner Cato Sells in charge. Little criticism has been directed at Government work for the Indians under this Commissioner. Possibly the attention of former critics is now centered upon the war, but the thorough and systematic attention given to Indian matters is the real reason. Commissioner Sells has kept himself fully acquainted with the Indians of the West, and special thought is now to be given to what may be called "The Lost Tribes" of the South. Who can remember when an Indian Commissioner visited the Seminoles of Florida, the Choctaws in Mississippi, the Choctaws and Chitimachas in Louisiana, and the Alabama Indians in Texas with a view to working out a helpful program looking to their educational and industrial advancement? This is what Commissioner Sells plans to do. It is to be suspected that the Southern Indians have received none too much attention, and some intelligent official persuasion is surely worth trying.

Altogether I am strongly disposed to extend a helping hand to the forgotten fellow—not in lavish expenditure nor in indefinite extension of paternal aid, but that he shall have an opportunity to lift himself from the condition into which he was thrust by other hands, and a power not his own. "The Lost Tribes" appeal to me as meriting a crumb from the bountiful table that for well-nigh a century has conferred its favors upon their brothers in other sections of the country.

**MISSIONARIES AND HUMANITARIAN AGENCIES.**

The events and experience of the year have deepened my appreciation of the earnest labors and helpful cooperation of missionaries at large and throughout the field. The period has been one of unusual affiliation in purpose and methods of work among all agencies, both individual and organized, for the spiritual and moral betterment of the Indians, and has reflected the broad fraternity of aim and effort so clearly developed by the great unity of our American cause in the relief of war-stricken nations. I am sincerely grateful for all that has been achieved through individual philanthropy and denom-

inational endeavor, and in this connection would include my sincere obligation to the Young Men's Christian Association, the Knights of Columbus, the organizations of the American Red Cross, and other organized instrumentalities working to the same great ends. I have been often assisted through these wonderful helpers of humanity, both in procuring important information about the Indian soldiers and in reaching some of them with a word of encouragement where conditions seemed to invite a personal note of sympathy and reassurance.

Your helpful cooperation in all matters affecting the Indians is appreciated, and has been a source of strength in carrying out successfully our policies regarding these people.

Very respectfully,

CATO SELLS,  
*Commissioner.*

The SECRETARY OF THE INTERIOR.

## STATISTICAL TABLES.<sup>1</sup>

TABLE 1.—*Comparative statement of work and force in Office of Indian Affairs since 1899.*

Year	Work.		Employees.	
	Communica- tions received. .	Increase (+) or decrease (-) over preced- ing year.	Total number em- ployed in Indian Office.	Increase (+) or decrease (-) over preced- ing year.
		Per cent.		Per cent.
1899.....	59,707		101	
1900.....	62,001	+ 4.84	115	+13.86
1901.....	67,376	+ 7.62	119	+ 3.48
1902.....	79,237	+17.60	132	+10.92
1903.....	79,115	+ .22	131	- .75
1904.....	86,388	+ 9.03	142	+ 8.39
1905.....	98,322	+13.55	149	+ 4.93
1906.....	106,533	+ 8.35	145	- 2.68
1907.....	117,556	+10.34	160	+10.34
1908.....	152,995	+30.14	179	+11.87
1909.....	176,765	+15.53	189	+ 5.58
1910.....	194,241	+ 9.88	203	+ 7.40
1911.....	197,637	+ 1.74	227	+11.82
1912.....	222,187	+12.37	224	- 1.32
1913.....	275,452	+23.97	237	+ 5.80
1914.....	280,744	+ 1.92	245	+ 3.37
1915.....	298,240	+ 6.23	260	+ 6.12
1916.....	284,195	- 4.70	260	.....
1917.....	281,618	- .91	262	+ .77
1918.....	242,938	-13.73	260	- .76

Per cent.

Increase in work, 1918, over 1899..... 306.88

Increase in force, 1918, over 1899..... 157.43

<sup>1</sup> Exclusive of Five Civilized Tribes in Oklahoma and scattered Indians under Government jurisdiction except where indicated.

TABLE 2.—*Indian population of the United States, exclusive of Alaska, June 30, 1918.*

(Figures compiled from reports of Indian School superintendents, supplemented by information from 1910 census for localities in which no Indian Office representative is located.)

Grand total.....	336,243
Five Civilized Tribes, including freedmen and intermarried whites.....	101,506
By blood.....	75,519
By intermarriage.....	2,582
Freedmen.....	23,405
Exclusive of Five Civilized Tribes.....	234,737

### INDIAN POPULATION BY STATES AND TERRITORIES.

Alabama.....	909	Idaho.....	4,144
Arizona.....	44,499	Illinois.....	188
Arkansas.....	460	Indiana.....	279
California.....	15,725	Iowa.....	356
Colorado.....	877	Kansas.....	1,414
Connecticut.....	152	Kentucky.....	234
Delaware.....	5	Louisiana.....	780
District of Columbia.....	68	Maine.....	892
Florida.....	585	Maryland.....	55
Georgia.....	95	Massachusetts.....	688



TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1918—Continued.

Michigan.....	7,514	Oklahoma.....	<sup>1</sup> 119,175
Minnesota.....	12,003	Oregon.....	6,657
Mississippi.....	1,253	Rhode Island.....	284
Missouri.....	313	South Carolina.....	331
Montana.....	12,079	South Dakota.....	23,217
Nebraska.....	2,463	Tennessee.....	216
Nevada.....	5,854	Texas.....	702
New Hampshire.....	34	Utah.....	3,120
New Jersey.....	168	Vermont.....	26
New Mexico.....	21,186	Virginia.....	539
New York.....	6,342	Washington.....	11,082
North Carolina.....	8,179	West Virginia.....	36
North Dakota.....	8,940	Wisconsin.....	10,302
Ohio.....	127	Wyoming.....	1,696

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
Total population <sup>a</sup> .....	336,243	106,489	105,385	96,496	113,612	169,355	46,808	72,316
Alabama: Not under agent.....	<sup>b</sup> 909	.....	.....	.....	.....	.....	.....	.....
Arizona.....	44,499	22,047	22,452	20,622	23,877	44,156	270	78
Camp Verde School—Mohave-Apache.....	435	221	214	169	266	418	17	.....
Colorado River Agency—Mohave-Chemehuevi.....	1,184	659	525	446	738	1,105	18	61
Fort Apache School—White Mountain Apache.....	2,455	1,224	1,232	1,213	1,243	2,348	108	.....
Havasupai School—Havasupai.....	171	89	82	50	121	171	.....	.....
Kaibab Agency—Kaibab Paiute.....	102	58	44	45	57	102	.....	.....
Leupp School—Navaho.....	1,441	704	737	779	662	1,441	.....	.....
Moqui School.....	4,225	2,191	2,034	2,007	2,218	4,225	.....	.....
Moqui (Hopi).....	2,285	1,206	1,079	1,067	1,228	2,285	.....	.....
Navaho.....	1,940	985	955	940	990	1,940	.....	.....
Navajo School—Navaho <sup>c</sup> .....	12,060	5,830	6,250	7,068	5,012	11,991	88	1
Pima School <sup>d</sup> .....	6,253	3,164	3,089	2,830	3,423	6,243	8	2
Maricopa (Gila River).....	269	130	139	127	142	269	.....	.....
Pima (Gila River).....	3,984	2,034	1,950	1,708	2,281	3,974	8	2
Gila Bend Reservation—Papago.....	2,000	1,000	1,000	1,000	1,000	2,000	.....	.....
Salt River School.....	1,277	682	595	567	710	1,275	2	.....
Maricopa.....	99	49	50	40	59	99	.....	.....
Mohave—Apache.....	249	135	114	90	159	247	2	.....
Pima.....	929	498	431	437	492	929	.....	.....
San Carlos School.....	2,623	1,372	1,251	1,216	1,407	2,594	20	9
Apache.....	2,580	1,340	1,220	1,185	1,375	2,531	20	9
Mohave.....	63	32	31	31	32	63	.....	.....
San Xavier School—Papago.....	5,237	2,619	2,618	1,200	4,087	5,237	.....	.....
Truxton Canon School—Walapai.....	450	224	226	171	279	441	9	.....
Western Navajo School.....	6,555	3,010	3,555	2,861	3,704	6,555	.....	.....
Moqui (Hopi).....	288	148	140	161	127	288	.....	.....
Navaho.....	6,087	2,782	3,305	2,620	3,467	6,087	.....	.....
Paiute.....	190	80	110	80	110	190	.....	.....
Arkansas: Not under agent.....	460	.....	.....	.....	.....	.....	.....	.....

<sup>a</sup> Includes 23,405 freedmen and 3,583 intermarried whites.<sup>b</sup> Correct as reported by superintendents.<sup>c</sup> 1910 census.<sup>d</sup> Includes Indians in New Mexico under this school.<sup>e</sup> 1917 report.<sup>f</sup> Former report.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1918—Continued.

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
California.....	15,725	7,975	7,750	5,857	9,868	10,020	4,175	1,530
Bishop School—Palute, Shoshoni, and Mosche.....	1,588	764	824	562	1,026	1,293	187	108
Campo School.....	229	115	114	80	149	203	25	1
Mission Indians at Campo.....	139	79	60	49	90	127	12	.....
Cuyapaipe.....	10	4	6	1	9	10	.....	.....
Laguna.....	4	2	2	1	3	3	1	.....
La Posta.....	10	3	7	4	6	9	1	.....
Manzanita.....	66	27	39	25	41	54	11	1
Digger Agency—Digger.....	299	147	152	99	200	45	234	20
Fort Bidwell School.....	750	351	399	246	504	725	21	4
Digger.....	9	5	4	.....	9	3	2	4
Palute.....	209	120	89	93	116	198	11	.....
Pit River.....	532	226	306	183	379	524	8	.....
Fort Yuma School—Yuma.....	885	449	386	320	515	800	31	4
Greenville School—Digger, Washo, Concow, and Ukie.....	693	360	324	277	416	340	171	182
Hoopa Valley School.....	1,485	723	762	633	852	886	551	48
Bear River.....	26	16	10	12	14	26	.....	.....
Eel River.....	48	26	22	26	22	36	12	.....
Hupa.....	476	236	240	201	275	210	243	23
Klamath.....	600	297	303	252	348	376	224	.....
Lower Klamath.....	335	148	187	142	193	238	72	26
Maliki School.....	634	352	282	216	418	559	38	42
Mission Indians at Augustine.....	22	13	9	6	16	22	.....	.....
Cabazon.....	31	17	14	7	24	31	.....	.....
Martinez.....	122	75	47	38	84	120	1	1
Mission Creek.....	13	8	5	4	9	13	.....	.....
Morongo.....	260	134	116	101	149	177	32	41
Palm Springs.....	49	27	22	9	40	49	.....	.....
San Manuel.....	57	28	29	14	43	57	.....	.....
Torres.....	90	50	40	37	53	90	.....	.....
Pala School.....	1,025	528	497	358	667	902	121	2
Mission Indians at Pala.....	205	97	108	72	133	161	42	2
Captain Gran le.....	140	75	65	60	80	123	17	.....
La Jolla.....	235	127	108	86	149	234	1	.....
Pauma.....	56	26	30	20	36	55	1	.....
Pechanga.....	199	101	98	43	156	199	.....	.....
Rincon.....	140	76	64	52	88	86	52	.....
San Pasqual.....	4	1	3	2	2	1	3	.....
Sycuan.....	46	25	21	23	23	41	5	.....
Roseburg (Oreg.) School—scattered Wichumni, Kawia, Pat River, and others in northern California.	5,000	2,500	2,500	1,800	3,200	2,500	1,875	1,625
Round Valley School—Concow, Ukie, and others.....	1,818	922	896	743	1,075	1,655	1,684	1,479
Soboba School.....	926	522	404	322	604	681	230	15
Mission Indians at Soboba.....	132	72	60	41	91	117	15	.....
Cahulla.....	130	69	61	34	96	123	7	.....
Inaja.....	35	18	17	12	23	18	17	.....
Los Coyotes.....	116	70	46	42	74	116	.....	.....
Mesa Grande.....	203	124	79	81	122	108	81	14
Santa Rosa.....	62	35	27	12	50	62	.....	.....
Santa Ynez.....	71	37	34	24	47	3	68	.....
Volcan.....	177	97	80	76	101	134	42	1
Tule River School.....	443	233	210	201	242	431	12	.....
Tule River.....	156	94	62	.....	.....	.....	.....	.....
Auberry.....	150	72	78	201	242	431	12	.....
Burrough.....	137	67	70	.....	.....	.....	.....	.....

\*Estimated.

TABLE 2.—*Indian population of the United States, exclusive of Alaska, June 30, 1918—Continued.*

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
Colorado.....	877	451	426	440	437	361	15	1
Southern Ute School—Capote and Moache Ute.....	309	177	192	164	205	353	15	1
Ute Mountain School—Capote and Moache Ute.....	508	274	234	276	232	506	.....	.....
Connecticut: Not under agent.....	152	.....	.....	.....	.....	.....	.....	.....
Delaware: Not under agent.....	15	.....	.....	.....	.....	.....	.....	.....
District of Columbia: Not under agent.....	168	.....	.....	.....	.....	.....	.....	.....
Florida: Seminole.....	585	336	249	255	330	569	3	13
Georgia: Not under agent.....	195	.....	.....	.....	.....	.....	.....	.....
Idaho.....	4,144	2,067	2,077	1,569	2,575	3,253	517	375
Coeur d'Alene School.....	829	412	417	310	519	625	106	66
Coeur d'Alene.....	612	305	306	240	373	423	94	96
Kallispel.....	91	51	40	35	56	91	.....	.....
Kootenai.....	125	56	69	35	90	111	14	.....
Fort Hall School.....	1,764	907	857	630	1,134	1,487	210	67
Bannock.....	358	191	167	608	1,106	1,437	210	67
Shoshoni.....	1,356	694	662					
Skull Valley.....	50	23	28					
Fort Lapwai School—Nex Perce...	1,551	748	803	629	922	1,140	199	212
Illinois: Not under agent.....	188	.....	.....	.....	.....	.....	.....	.....
Indiana: Not under agent—Miami and others.....	1279	.....	.....	.....	.....	.....	.....	.....
Iowa: Sac and Fox School—Sac and Fox.....	356	187	169	122	234	356	.....	.....
Kansas.....	1,414	742	672	771	643	720	336	368
Kickapoo School.....	637	326	311	342	295	205	199	233
Iowa.....	322	159	163	173	149	12	77	233
Kickapoo.....	222	120	102	126	96	182	40	.....
Sac and Fox.....	93	47	46	43	50	11	82	.....
Potawatomi Agency — Prairie Band of Potawatomi.....	777	416	361	429	348	515	137	125
Kentucky: Not under agent.....	1234	.....	.....	.....	.....	.....	.....	.....
Louisiana: Not under agent.....	1780	.....	.....	.....	.....	.....	.....	.....
Maine: Not under agent.....	1892	.....	.....	.....	.....	.....	.....	.....
Maryland: Not under agent.....	155	.....	.....	.....	.....	.....	.....	.....
Massachusetts: Not under agent.....	1688	.....	.....	.....	.....	.....	.....	.....
Michigan.....	7,514	565	532	516	581	200	400	497
Mackinac Agency—L'Anse, Vieux Desert, and Ontonagon Bands of Chippewa.....	1,097	565	532	516	581	200	400	497
Not under agent—Scattered Chippewa, Ottawa, Potawatomi, and others.....	6,417	.....	.....	.....	.....	.....	.....	.....
Minnesota.....	12,008	5,944	6,069	6,042	5,961	3,173	4,315	3,614
Fond du Lac School—Chippewa...	1,067	556	511	550	517	80	553	434
Grand Portage School—Chippewa..	321	133	133	137	134	8	202	111
Leech Lake School.....	1,786	901	885	760	1,026	980	727	79
Cass and Winibgoishish.....	471	227	244	209	262	302	160	9
Leech Lake.....	815	403	412	366	449	450	344	21
White Oak Point (Miss.) Chippewa.....	500	271	229	185	315	228	223	40

1910 census.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1918—Continued.

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
<b>Minnesota—Continued.</b>								
Nett Lake School—Chippewa (Bols Fort).....	614	284	330	232	332	380	172	62
Pipestone (Birch Cooley) Mdewakanton and Wapagaita, Stour and Sisseton, and Wahpeton.....	164	79	85	84	80	65	85	14
Red Lake School—Red Lake Chippewa.....	1,496	741	755	770	726	(1)	(1)	(1)
White Earth School.....	6,555	3,245	3,310	3,459	3,096	1,665	2,576	2,314
White Earth (Miss.) Chippewa.....	2,551	1,263	1,288	3,459	3,096	1,665	2,576	2,314
Mille Lac (removal).....	1,236	590	646					
Otter Tail Pillager.....	856	430	426					
Gull Lake (Miss.).....	433	210	223					
Mille Lac (nonremoval).....	290	138	152					
Pembina Pillager.....	436	240	196					
Leech Lake Pillager.....	283	134	149					
White Oak Point (removal).....	292	139	153					
Fond du Lac (removal).....	114	66	48					
Cass and Winbigoshish.....	64	35	29					
Mississippi: Not under agent.....	* 1,253							
Missouri: Not under agent.....	* 313							
<b>Montana</b> .....	12,079	6,187	5,892	5,586	6,493	6,551	3,210	2,318
Blackfeet School—Blackfeet.....	2,773	1,472	1,301	1,402	1,371	1,146	1,119	508
Crow Agency—Crow.....	1,708	858	850	763	940	1,240	262	201
Flathead School—Confederated Flathead.....	2,426	1,234	1,192	1,023	1,403	645	783	993
Fort Belknap School.....	1,206	628	580	502	706	843	243	122
Assiniboin.....	638	326	312	260	378	463	98	77
Grosventre.....	570	302	268	242	328	380	145	46
Fort Peck School.....	2,039	1,047	992	1,047	992	1,078	527	434
Yankton.....	1,287	670	617	1,047	992	1,078	527	434
Assiniboin.....	752	377	375					
Rocky Boy's Agency—Rocky Boy Band.....	460	222	238	211	249	259	201	.....
Tongue River School—Northern Cheyenne.....	1,470	721	749	638	832	1,340	70	80
<b>Nebraska</b> .....	* 2,463	1,296	1,168	1,101	1,362	1,960	199	304
Omaha School—Omaha.....	1,377	716	661	706	669	1,066	96	215
Winnebago School: Winnebago.....	1,086	579	507	393	693	894	103	89
<b>Nevada</b> .....	5,854	2,919	2,935	2,078	2,000	5,285	419	150
Fallon School.....	420	215	205	124	296	399	21	.....
Paute at Fallon.....	308	164	144	87	221	299	9	.....
Lovelocks.....	112	51	61	37	75	100	12	.....
Fort McDermitt School—Paute.....	349	171	178	143	206	335	14	.....
Moapa River School—Paute.....	113	58	55	29	84	106	4	.....
Nevada School—Paute.....	561	242	319	212	349	557	4	.....
Walker River School.....	304	404	400	280	524	728	76	.....
Paute.....	501	250	251	280	524	728	76	.....
Paute (Mason Valley).....	303	154	149					
Western Shoshone School.....	607	329	278	290	317	607	.....	.....
Hopi.....	1	.....	1	290	317	607	.....	.....
Paute.....	264	157	107					
Shoshoni.....	342	172	170					

\* Unknown.

\* 1910 census.

\* This does not include 1,531 Indians on Santee Reservation now listed under Yankton, Dak.

TABLE 2.—Indian population of the United States, exclusive of Alaska. June 30, 1918—Continued.

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
Nevada—Continued.								
Reno, special agent <sup>1</sup> .....	3,000	1,500	1,500	1,000	2,000	2,550	200	150
Pahute.....	1,400	700	700	1,700	3,400	4,500	400	200
Shoshoni.....	1,000	500	500					
Washo.....	600	300	300					
New Hampshire: Not under agent.....	<sup>2</sup> 24							
New Jersey: Not under agent.....	<sup>2</sup> 168							
New Mexico.....	21,186	10,725	10,461	10,526	10,660	20,718	382	86
Jicarilla School—Jicarilla Apache.....	621	335	286	271	350	620	1	
Mescalero School—Mescalero Apache.....	<sup>2</sup> 630	303	327	276	354	597	22	11
Pueblo Bonito School—Navaho.....	2,724	1,200	1,524	1,362	1,362	2,724		
Pueblo day schools.....	8,896	4,632	4,264	3,927	4,969	8,462	359	75
Navaho.....	625	303	322	281	344	625		
Pueblo.....	8,271	4,329	3,942	3,646	4,625	7,837	359	75
San Juan School—Navaho.....	6,500	3,275	3,225	3,900	2,600	6,500		
Zuni School—Pueblo.....	1,815	980	835	790	1,025	1,815		
New York.....	6,342	3,078	2,904	2,472	3,510			5,982
New York Agency.....	5,982	3,078	2,904	2,472	3,510			5,982
Cayuga.....	177	83	94	64	113			177
Oneida.....	271	146	125	92	179			271
Onondaga.....	553	293	260	182	371			553
Seneca (Alleghany).....	953	497	456	415	538			953
Seneca (Cattaraugus).....	1,321	669	662	472	849			1,321
Seneca (Tonawanda).....	511	285	226	206	305			511
St. Regis (not a part of Six Nations).....	1,584	781	803	799	785			1,584
Tuscarora.....	362	199	163	117	245			362
Montauk.....	30	15	15	15	15			30
Poospatuck.....	20	10	10	10	10			20
Shinnecock.....	200	100	100	100	100			200
Not under agent.....	<sup>2</sup> 360							
North Carolina.....	8,179	1,198	1,145	1,227	1,116	1,000	900	443
Cherokee School—Eastern Cherokee.....	2,343	1,198	1,145	1,227	1,116	1,000	900	443
Not under agent.....	<sup>2</sup> 5,836							
North Dakota.....	8,940	4,471	4,469	4,301	4,639	4,212	2,166	2,572
Fort Berthold School.....	1,204	599	605	580	624	848	317	89
Arikara.....	417	200	217	199	218	259	147	11
Grosventre.....	513	257	256	244	269	375	124	14
Mandan.....	274	142	132	137	137	214	46	14
Fort Totten School—Sisseton, Wahpeton, and Cuthead Sioux (known as Devils Lake Sioux).....	983	509	474	482	501	565	270	148
Standing Rock School—Sioux <sup>3</sup> .....	3,455	1,705	1,750	1,424	2,031	2,640	783	32
Turtle Mountain School—Turtle Mountain Chippewa.....	3,298	1,658	1,640	1,815	1,483	169	786	2,353
Ohio: Not under agent.....	<sup>2</sup> 127							
Oklahoma.....	119,175	8,875	8,794	8,683	8,986	84,267	16,016	45,487
Cantonment School.....	780	420	360	341	439	695	54	21
Arapaho.....	233	129	104	103	130	212	11	10
Cheyenne.....	547	291	256	238	309	483	43	21

<sup>1</sup> See Roseburg, California.<sup>2</sup> 1910 census.<sup>3</sup> Includes 182 Apaches; 1913 Fort Sill removal.<sup>4</sup> 1910 census minus 260 Montauk, Poospatuck and Shinnecock.<sup>5</sup> 1917 report.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1918—Continued.

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
Oklahoma—Continued.								
Cheyenne and Arapaho School.....	1,252	632	620	544	708	902	284	66
Arapaho.....	515	262	253	544	708	902	284	66
Cheyenne.....	737	370	367					
Kiowa Agency.....	4,583	2,265	2,318	2,301	2,282	2,290	2,000	293
Apache.....	181	85	96	2,301	2,282	2,290	2,000	293
Comanche.....	1,600	794	806					
Kiowa.....	1,577	766	811					
Wichita and affiliated bands.....	1,139	571	568					
Apache prisoners.....	86	49	37					
Osage School—Osage.....	2,186	1,125	1,061	965	1,221	802	1,384	( <sup>1</sup> )
Otoe School—Oto and Missouri.....	524	271	253	309	215	446	58	20
Pawnee School—Pawnee.....	716	350	366	359	357	558	124	34
Ponca School.....	1,080	535	525	641	419	388	437	235
Kaw (Kansas).....	385	190	175	253	112	98	32	235
Ponca.....	648	321	327	366	282	250	398	.....
Tonkawa.....	47	24	23	22	25	40	7	.....
See and Fox School.....	683	332	351	357	326	396	145	142
Iowa.....	83	34	49	28	55	45	38	.....
See and Fox.....	600	298	302	329	271	351	107	142
Seger School.....	747	367	380	308	439	692	55	.....
Arapaho.....	140	62	78	66	74	106	24	.....
Cheyenne.....	607	305	302	242	365	586	21	.....
Seneca School.....	2,100	1,089	1,061	1,126	974	117	492	1,491
Eastern Shawnee.....	158	70	88	81	77	3	62	93
Ottawa.....	274	146	128	173	101	3	10	261
Quapaw.....	337	166	172	192	145	79	27	281
Seneca.....	470	232	238	272	198	14	292	164
Wyandot.....	468	245	223	178	290	.....	27	441
Peoria—Miami (citizen) <sup>2</sup> .....	393	181	212	230	163	18	74	301
Shawnee School.....	3,088	1,539	1,499	1,432	1,606	207	800	2,241
Absentee Shawnee.....	538	282	256	261	277	3	535	.....
Citizen Potawatomi.....	2,288	1,148	1,140	1,085	1,293	.....	4	2,241
Mexican Kickapoo.....	212	109	103	86	126	304	8	.....
Five Civilized Tribes.....	101,506	.....	.....	.....	.....	26,774	10,393	40,934
Cherokee Nation.....	41,824	.....	.....	.....	.....	8,708	4,778	23,424
By blood.....	36,432	.....	.....	.....	.....	.....	.....	.....
By intermarriage.....	286	.....	.....	.....	.....	8,708	4,778	23,424
Delawares.....	187	.....	.....	.....	.....	.....	.....	.....
Freedmen.....	4,919	.....	.....	.....	.....	.....	.....	.....
Chickasaw Nation.....	10,966	.....	.....	.....	.....	1,515	966	3,523
By blood.....	5,659	.....	.....	.....	.....	1,515	966	3,523
By intermarriage.....	645	.....	.....	.....	.....	.....	.....	.....
Freedmen.....	4,662	.....	.....	.....	.....	.....	.....	.....
Choctaw Nation.....	26,828	.....	.....	.....	.....	8,444	2,473	9,882
By blood.....	17,488	.....	.....	.....	.....	8,444	2,473	9,882
By intermarriage.....	1,651	.....	.....	.....	.....	.....	.....	.....
Mississippi Choctaw.....	1,686	.....	.....	.....	.....	.....	.....	.....
Freedmen.....	6,029	.....	.....	.....	.....	.....	.....	.....
Creek Nation.....	18,761	.....	.....	.....	.....	6,858	1,698	3,396
By blood.....	11,962	.....	.....	.....	.....	6,858	1,698	3,396
Freedmen.....	6,800	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup>Included with mixed one-half or more.<sup>2</sup>1916 report.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1918—Continued.

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
Oklahoma—Continued.								
Five Civilized Tribes—Continued.								
Seminole Nation.....	3,127					1,254	478	400
By blood.....	2,141					1,254	478	400
Freedmen.....	986							
Oregon.....	6,657	3,227	3,430	2,515	4,142	3,931	1,604	1,033
Klamath School—Klamath Modoc, Palute, and Pit River.....	1,160	545	615	518	643	818	365	77
Roseburg School—Scattered Indians on public domain <sup>1</sup> .....	3,000	1,500	1,500	1,069	1,930	1,800	1,125	375
Siletz School—Confederated Siletz.....	446	233	213	193	253	225	207	14
Umatilla School—Cayuse, Umatilla, and Walla Walla.....	1,229	574	655	439	790	898	65	585
Warm Springs School—Wasco, Tenino, and Palute.....	822	375	447	285	537	790	33	
Rhode Island: Not under agent.....	<sup>2</sup> 284							
South Carolina: Not under agent—Catawbas, Cherokee, Oneida, and others.....	<sup>2</sup> 331							
South Dakota.....	23,217	11,739	11,468	11,064	12,153	12,908	6,271	4,048
Cheyenne River School—Blackfeet, Miniconjou, Sans Arc, and Two Kettle Sioux.....	2,845	1,422	1,423	1,260	1,585	1,644	594	607
Crow Creek School—Lower Yanktonia Sioux.....	970	466	504	407	563	710	212	48
Flandreau School—Flandreau Sioux.....	298	156	137	114	179	226	67	
Lower Brule School—Lower Brule Sioux.....	513	264	249	255	257	252	181	80
Pine Ridge School—Ogala Sioux.....	7,340	3,708	3,637	3,479	3,861	4,097	1,321	1,322
Rosebud School—Rosebud Sioux.....	5,521	2,897	2,624	2,816	2,705	3,147	1,002	772
Sisseton School—Sisseton and Wahpeton Sioux.....	2,280	1,175	1,105	1,080	1,200	700	1,200	380
Yankton School.....	3,455	1,846	1,609	1,652	1,803	1,522	1,094	539
Yankton Sioux.....	1,924	905	1,019	955	969	915	640	369
Santee Sioux <sup>3</sup> .....	1,193	588	605	482	710	512	316	264
Ponca <sup>4</sup> .....	338	153	185	214	124	94	138	105
Tennessee: Not under agent.....	<sup>2</sup> 216							
Texas: Not under agent.....	702							
Alabama.....	<sup>4</sup> 192							
Koosati, Seminole, Isleta, and others.....	<sup>4</sup> 510							
Utah.....	3,120	846	858	723	981	1,586	95	23
Goshute Agency.....	423	209	214	162	261	410	13	
Goshute.....	168	89	79					
Cedar City.....	34	17	17					
Indian Peaks.....	16	7	9					
Kanosh.....	37	18	19	162	261	410	13	
Kooskarum.....	37	18	19					
Warm Creek.....	14	9	5					
Washakie.....	117	51	66					
Shivwits School—Palute.....	119	56	63	48	71	119		
Utah and Ouray Agency.....	1,162	581	581	512	649	1,057	82	23
Uinta Ute.....	442	212	230					
Uncompahgre Ute.....	439	215	224	512	649	1,057	82	23
White River Ute.....	261	124	137					
Not under agent—Palute and others.....	1,416							

<sup>1</sup> Estimated.<sup>2</sup> 1910 census.<sup>3</sup> Formerly listed under Nebraska.

1916 report.

<sup>4</sup> Special agent's report, 1910.

TABLE 2.—Indian population of the United States, exclusive of Alaska, June 30, 1918—Continued.

States, superintendencies, and tribes.	Total population.	Male.	Female.	Minors.	Adults.	Full blood.	Mixed blood.	
							One-half or more.	Less than half.
Vermont: Not under agent.	1 26							
Virginia: Not under agent.	1 539							
Washington.	11,082	5,495	5,587	4,797	6,285	6,952	2,513	1,617
Colville School—Confederated Colville.	2,566	1,273	1,293	1,100	1,466	1,453	469	644
Cushman School.	2,143	1,091	1,052	982	1,161	1,343	571	229
Chehalis.	116	69	47	46	70	87	6	23
Muckleshoot.	174	75	99	73	101	136	37	1
Nisqually.	82	45	37	22	60	51	21	10
Skokomish (Challam).	204	99	105	102	102	132	72	
Squamish Island.	87	48	39	39	48	87	35	15
Unattached.	1,480	755	725	700	780	900	400	180
Cowlitz.	1 490	240	250					
Challam.	534	288	246					
Payalmp.	1 182	75	77	700	780	900	400	180
Various other Indians.	304	152	152					
Neah Bay School.	662	351	311	263	399	640	42	
Hoh.	46	25	21	15	31	46		
Makah.	411	210	201	182	229	371	40	
Osatto.	15	6	9	1	14	15		
Quileute.	210	110	100	85	125	208	2	
Spokane School—Spokan.	604	268	336	263	351	319	73	212
Taholah School.	724	357	377	302	422	310	235	199
Queets River Reservation.	48	20	28	15	23	46	2	
Quileute.	15	4	11	2	13	13	2	
Quinalt.	23	16	17	13	20	23		
Quinalt Reservation—Quinalt.	686	337	349	287	409	364	223	199
Tulalip School.	1,353	674	679	632	721	887	433	33
Lummi.	513	250	263	262	251	399	200	14
Port Madison—Squamish.	294	104	100	103	101	84	105	15
Swinomish.	221	109	112	97	124	196	24	1
Tulalip (remnants of many tribes and bands).	415	211	204	180	235	308	104	3
Yakima School—Confederated Yakima.	3,000	1,481	1,519	1,185	1,815	2,000	700	300
West Virginia: Not under agent.	1 36							
Wisconsin.	10,302	5,257	5,045	4,461	5,841	5,465	2,697	2,140
Grand Rapids Agency—Potawatomi and Winnebago.	1 1,372	679	693	545	827	1,358	9	5
Hayward School—Chippewa.	1 1,276	639	647	498	778	216	866	194
Keeshena School.	2,364	1,269	1,105	1,086	1,278	420	897	1,047
Menominee.	1,758	944	814	812	946	420	897	441
Stockbridge and Munsee.	606	315	291	274	332			606
Lac du Flambeau School—Chippewa.	744	349	395	277	467	456	167	121
Leona Agency—Potawatomi.	355	196	159	166	190	355		
La Pointe School—Chippewa at Bad River.	1,054	528	526	424	630	48	354	652
Onondaga School—Onondaga.	2,610	1,340	1,270	1,220	1,390	2,610		
Red Cliff School—Chippewa.	557	277	280	226	331	2	404	121
Wyoming.	1,696	873	823	758	938	1,218	225	253
Shoshone Agency.	1,696	873	823	758	938	1,218	225	253
Arapaho.	853	428	415	391	462	734	108	11
Shoshoni.	843	425	408	367	476	484	117	242

1 1910 census.

2 Estimated.

3 1917 report.

4 New citizens.



TABLE 3.—Indians under Federal supervision—unallotted and holding trust and fee patents, June 30, 1918.

States and superintendencies.	Total Indians under Federal supervision.	Allotted.				Unallotted.
		Total allotted.	Holding trust or restricted fee patents.	Indians who have received—		
				Part of allotment.	Entire allotment.	
Total, 1918.....	309,755	178,094	64,098	3,593	110,403	131,661
1917.....	309,409	179,374	67,972	3,495	107,907	130,035
1916.....	312,654	184,865	72,508	3,492	108,865	126,547
1915.....	309,911	182,289	68,980	2,623	110,686	126,579
1914.....	307,891	180,605	69,944	1,643	109,018	124,797
1913.....	300,784	170,444	65,768	1,420	108,999	121,233
1912.....	300,930	177,626	70,478	1,926	103,843	120,576
1911.....	296,320	164,215	88,182		176,033	120,780
1901.....	247,522	64,863				
1800.....	230,437	15,166				
Arizona.....	44,409	5,277	5,277			39,222
Camp Verde.....	435					435
Colorado River.....	1,184	1,184	1,184			
Fort Apache.....	2,456					2,456
Havasupai.....	171					171
Kalbab.....	102					102
Leupp.....	1,441					1,441
Moqui.....	4,225					4,225
Navajo.....	12,080					12,080
Pima.....	6,253	3,243	3,243			3,010
Salt River.....	1,277	759	759			518
San Carlos.....	2,623					2,623
San Xavier.....	5,237	91	91			5,146
Truxton Canon.....	450					450
Western Navajo.....	6,565					6,565
California.....	10,726	3,122	3,097	1	24	7,608
Bishop.....	1,588	235	231		4	1,353
Campo.....	229					229
Digger.....	299	22	22			277
Fort Bidwell.....	750	212	212			538
Fort Yuma.....	835	697	697			138
Greenville.....	693	206	206			487
Hoopa Valley.....	1,485	1,009	989		20	476
Maidu.....	634					634
Pala.....	1,025	186	186			839
Round Valley.....	1,818	492	491	1		1,326
Soboba.....	926					926
Tule River.....	443	63	63			380
Colorado.....	877	146			146	731
Southern Ute.....	369	146			146	222
Ute Mountain.....	508					508
Florida: Seminole.....	585					585
Idaho.....	4,144	2,829	2,543	37	249	1,315
Coeur d'Alene.....	829	483	384		104	341
Fort Hall.....	1,764	1,544	1,499		45	220
Fort Lapwai.....	1,551	797	660	37	100	754
Iowa: Sac and Fox.....	356					356
Kansas.....	1,414	730	453	92	185	684
Kickapoo.....	637	269	166	13	90	368
Potawatomi.....	777	461	287	79	95	316
Michigan: Mackinac.....	1,097	73	73			1,024

<sup>1</sup> Includes fee patents for part of their allotment.<sup>2</sup> 1917 report.

TABLE 3.—*Indians under Federal supervision—unallotted and holding trust and fee patents, June 30, 1918—Continued.*

States and superintendencies.	Total Indians under Federal supervision.	Allotted.				Unallotted
		Total allotted.	Holding trust or restricted fee patents.	Indians who have received—		
Part of allotment.	Entire allotment.					
Minnesota.....	12,008	4,971	4,056	506	409	7,032
Fond du Lac.....	1,067	284	245	9	30	783
Grand Portage <sup>1</sup> .....	321	164	146	.....	18	157
Leech Lake.....	1,786	959	802	4	153	827
Nett Lake.....	614	282	223	.....	59	332
Pipestone (Birch Cooley).....	164	43	43	.....	.....	121
Red Lake.....	1,496	.....	.....	.....	.....	1,496
White Earth.....	6,555	3,239	2,597	463	149	3,316
Montana.....	12,079	7,281	6,231	207	843	4,796
Blackfeet.....	2,773	2,236	2,130	.....	106	537
Crow.....	1,703	1,197	1,100	2	95	506
Flathead.....	2,426	1,809	1,326	10	473	617
Fort Belknap.....	1,208	.....	.....	.....	.....	1,208
Fort Peck.....	2,039	2,039	1,675	195	169	.....
Rocky Boy's Agency.....	460	.....	.....	.....	.....	460
Tongue River.....	1,470	.....	.....	.....	.....	1,470
Nebraska.....	* 2,463	849	364	59	426	1,614
Omaha.....	1,377	556	231	41	284	831
Winnebago.....	1,086	293	133	18	142	798
Nevada.....	5,854	1,397	1,391	.....	6	4,457
Fallon.....	420	284	284	.....	.....	136
Fort McDermitt.....	349	86	86	.....	.....	263
Moapa River.....	113	113	113	.....	.....	.....
Nevada.....	561	.....	.....	.....	.....	561
Walker River.....	804	304	304	.....	.....	500
Western Shoshone.....	607	.....	.....	.....	.....	607
Reno, special agent <sup>2</sup> .....	3,000	610	604	.....	6	2,390
New Mexico.....	21,186	473	473	.....	.....	20,713
Jicarilla.....	621	473	473	.....	.....	148
Mescalero.....	630	.....	.....	.....	.....	630
Pueblo Bonito.....	2,724	.....	.....	.....	.....	2,724
Pueblo day schools.....	8,586	.....	.....	.....	.....	8,586
San Juan.....	6,500	.....	.....	.....	.....	6,500
Zuni.....	1,815	.....	.....	.....	.....	1,815
New York: New York Agency.....	5,983	.....	.....	.....	.....	5,983
North Carolina: Cherokee.....	2,343	.....	.....	.....	.....	2,343
North Dakota.....	8,940	7,069	5,923	292	854	1,871
Fort Berthold.....	1,204	926	822	49	45	278
Fort Totten.....	983	413	281	81	51	570
Standing Rock <sup>3</sup> .....	3,445	3,267	3,100	92	65	198
Turtle Mountain.....	3,298	2,473	1,710	79	698	826
Oklahoma.....	116,494	110,283	6,213	946	103,124	6,211
Cantonment.....	780	368	303	1	59	417
Cheyenne and Arapaho.....	1,262	627	431	21	175	626
Five Civilized Tribes.....	101,506	101,506	( <sup>4</sup> )	.....	* 101,506	.....
Kiowa.....	4,583	3,028	2,873	10	140	1,500
Osage.....	2,186	1,812	1,355	457	.....	374
Otoe.....	524	300	132	120	48	224
Pawnee.....	716	291	196	6	80	425
Ponca.....	1,080	627	339	230	68	433
Sac and Fox.....	683	238	98	16	124	445
Sage.....	747	365	306	15	44	382
Seneca.....	1,707	771	.....	.....	771	936
Shawnee.....	780	360	190	70	100	300

<sup>1</sup>1917 report.<sup>2</sup>This does not include 1,193 Indians on Santee reservation now listed under Yankton, S. Dak.<sup>3</sup>See Roseburg, Oreg.<sup>4</sup>29,719 restricted Indians as to alienation.<sup>5</sup>Does not include citizen Potawatomi.

TABLE 3.—*Indians under Federal supervision—unallotted and holding trust and fee patents, June 30, 1918—Continued.*

States and superintendencies.	Total Indians under Federal supervision.	Allotted.				Unallotted.
		Total allotted.	Holding trust or restricted fee patents.	Indians who have received—		
				Part of allotment.	Entire allotment.	
Oregon.....	11,657	3,873	3,489	19	365	7,784
Klamath <sup>1</sup> .....	1,180	783	759	.....	24	377
Roseburg <sup>1</sup> .....	8,000	2,000	1,977	.....	23	6,000
Siletz.....	446	210	114	17	79	236
Umatilla.....	1,229	449	212	2	285	780
Warm Springs.....	822	431	437	.....	4	391
South Dakota.....	22,879	17,745	14,388	1,299	2,068	5,134
Cheyenne River.....	2,845	2,714	2,422	81	211	131
Crow Creek.....	970	970	888	2	80	.....
Flandreau.....	293	.....	.....	.....	.....	293
Lower Brule.....	513	473	407	10	58	40
Pine Ridge.....	7,340	6,276	5,272	599	405	1,064
Rosebud.....	5,521	5,521	4,914	102	505	.....
Siouxton.....	2,280	683	161	295	237	1,597
Yankton.....	3,117	1,108	324	210	574	2,009
Utah.....	1,704	620	615	1	4	1,084
Goshute.....	423	.....	.....	.....	.....	423
Shivwits.....	119	.....	.....	.....	.....	119
Uintah and Ouray.....	1,162	620	615	1	4	542
Washington.....	11,082	6,966	6,381	80	505	4,116
Colville.....	2,566	2,486	2,304	2	180	80
Cushman.....	2,143	168	159	4	5	1,975
Neah Bay.....	682	276	276	.....	.....	406
Spokane.....	604	489	397	4	88	115
Taholah.....	734	486	447	.....	39	248
Tulalip.....	1,363	176	162	1	13	1,177
Yakima.....	3,000	2,586	2,636	69	180	115
Wisconsin.....	9,696	3,064	1,877	49	1,138	6,632
Grand Rapids.....	1,372	.....	.....	.....	.....	1,372
Hayward.....	1,276	509	423	.....	86	767
Keshena.....	1,758	.....	.....	.....	.....	1,758
Lac du Flambeau.....	744	354	329	.....	25	360
Leona.....	355	.....	.....	.....	.....	355
La Pointe.....	1,064	1,064	931	4	119	.....
Onoda.....	2,610	1,021	109	45	887	1,589
Red Cliff.....	527	126	85	.....	41	401
Wyoming: Shoshone.....	1,696	1,326	1,254	5	67	370

<sup>1</sup> 1917 report.<sup>2</sup> Includes 5,000 Indians in California; now under Greenville, Siletz, and Warm Springs.<sup>3</sup> Includes 1,193 Indians, Santee Reservation, formerly under Nebraska.<sup>4</sup> Does not include Stockbridge and Munsee citizen Indians.

TABLE 4.—Marriages, missionaries, churches, English language, dress, citizenship, crimes, misdemeanors, etc., June 30, 1918.

States and super- tendencies.	Marriages.				Crimes.		Misdemeanors.		Arrests for drunkenness.		Missionaries working among Indians.		Church-going Indians.		Indians who—				
	Between whites.	Between Indians.	By tribal custom.	By legal procedure.	Plural marriages existing June 30, 1918.	By Indians.	By whites.	By Indians.	By whites.	Indians.	Whites.	Protestant.	Catholic.	Church-going Indians.	Speak English language.	Read and write English language.	Wear citizens' clothing.	Are citizens of the United States.	Are voters.
Totals, 1918.....	185	1,607	378	1,416	329	284	66	924	464	929	260	405	222	564	116,969	76,765	122,228	79,697	26,336
1917.....	250	1,697	337	1,510	346	235	90	1,186	325	1,065	124	430	275	616	116,406	76,806	121,207	78,961	26,336
1916.....	176	1,717	498	1,398	421	263	187	1,044	221	1,278	119	399	267	617	113,494	74,972	121,201	78,965	26,336
1915.....	111	1,633	474	1,210	219	312	120	942	165	1,489	135	432	291	625	113,928	74,972	122,496	74,972	24,064
1914.....	168	1,892	498	1,516	164	306	229	881	512	1,815	261	431	282	563	104,994	66,236	122,496	80,241	22,118
1913.....	200	1,800	516	1,484	201	292	244	822	348	1,960	133	425	277	554	100,236	62,866	122,496	74,245	22,118
1912.....	172	3,151	779	1,544	588	266	207	1,364	327	2,067	166	386	253	512	90,431	54,943	149,521	76,543	22,118
1911.....	.....	608	1,177	.....	.....	.....	.....	.....	.....	.....	.....	253	189	458	.....	.....	128,410	.....	.....
1900.....	.....	469	891	.....	.....	.....	.....	.....	.....	.....	.....	177	118	348	.....	.....	131,714	.....	.....
1890.....	.....	367	770	.....	.....	.....	.....	.....	.....	.....	.....	144	130	203	.....	.....	116,196	.....	.....
Arizona.....	1	372	101	272	307	66	.....	239	1	122	.....	60	30	69	4,585	7,226	86,915	22	22
Camp Verde.....	8	6	.....	.....	1	2	.....	1	.....	2	.....	2	.....	76	.....	178	635	1	1
Colorado River.....	11	.....	.....	11	.....	.....	.....	.....	.....	10	.....	1	.....	120	.....	692	1,134	.....	.....
Fort Apache.....	14	.....	.....	14	8	2	.....	5	.....	.....	.....	2	.....	.....	.....	20	1,412	.....	.....
Havasupai.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96	56	.....	.....
Kabab.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	171	.....	.....	.....
Leupp.....	25	20	.....	6	39	2	.....	.....	.....	.....	.....	12	.....	3	.....	80	1,028	.....	.....
Navajo.....	8	2	.....	.....	2	13	.....	.....	.....	1	.....	15	.....	140	.....	250	1,200	.....	.....
Navajo.....	130	10	120	120	200	18	.....	69	.....	105	.....	7	.....	10	.....	666	400	.....	.....
Phoenix.....	10	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	4	.....	1	.....	1,000	10,000	.....	.....
Pima.....	49	.....	.....	49	1	5	.....	.....	.....	2	.....	4	.....	11	.....	780	6,238	.....	.....
Salt River.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....	950	.....	.....	.....
San Carlos.....	6	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	3	.....	1	.....	950	.....	.....	.....
San Xavier.....	58	10	40	40	6	1	.....	164	.....	2	.....	3	.....	1	.....	950	.....	.....	.....
Fort Huachuca.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	950	.....	.....	.....
Western Navajo.....	50	50	50	50	50	18	.....	5	.....	.....	.....	7	.....	2	.....	450	3,500	.....	.....

\* 1916 report.

\* 1917 report.

\* Not reported.

\* Exclusive of Five Civilized Tribes.

TABLE 4.—*Marriages, missionaries, churches, English language, dress, citizenship, crimes, misdeemeanors, etc., June 30, 1918—Continued.*

States and superintendencies.	Marriages.				Plural marriages existing June 30, 1918.	Crimes.		Misdeemeanors.		Arrests for drunkenness.		Missionaries working among Indians.		Church-going Indians.	Indians who—								
	Between Indians and whites.	Between Indians.	By tribal custom.	By legal procedure.		By Indians.	By whites.	By Indians.	By whites.	Indians.	Whites.	Protestant.	Catholic.		Protestant.	Catholic.	Speak English language.	Read and write English language.	Wear clothing.	Are citizens of the United States.	Are voters.		
California.....	6	108	37	77	2	2	1	1	19	2	17	2	25	24	36	1,535	3,228	9,186	4,592	11,608	5,373	1,142	
Bishop.....	3	3	2	2	1	1	1	1	2	2	1	1	1	1	1	200	222	1,000	500	1,588	1,000	20	
Campo.....	4	4	2	2	1	1	1	1	2	2	1	1	1	1	1	(1)	222	1,111	500	1,588	1,000	20	
Digger.....	4	4	3	1	1	1	1	1	12	2	3	2	1	1	2	2	(1)	299	550	299	550	299	14
Fort Bidwell.....	11	10	10	13	1	1	1	1	12	2	8	2	1	1	2	2	300	700	300	750	750	750	
Fort Yuma.....	13	10	10	13	1	1	1	1	12	2	8	2	1	1	2	192	300	693	450	693	450	60	
Greenville.....	26	26	10	26	1	1	1	1	3	2	2	2	2	2	2	120	460	1,000	600	1,485	810	418	
Hoop Valley.....	6	7	10	3	2	2	2	2	3	2	2	2	2	2	2	177	383	1,000	600	1,485	810	418	
Malhi.....	5	5	2	3	2	2	2	2	3	2	2	2	2	2	2	177	383	1,000	600	1,485	810	418	
Pala.....	11	11	4	4	1	1	1	1	3	2	2	2	4	2	7	6	1,067	725	428	1,024	810	10	
Round Valley.....	4	4	1	1	1	1	1	1	3	2	2	2	2	2	2	259	247	1,775	(2)	1,818	1,818	620	
Sherman Institute.....	9	9	1	1	1	1	1	1	2	2	2	6	5	6	3	289	894	629	430	926	926	810	
Soboba.....	1	1	1	1	1	1	1	1	2	2	2	6	5	6	3	249	894	629	430	926	926	810	
Tule River.....	1	1	1	1	1	1	1	1	2	2	2	6	5	6	3	249	894	629	430	926	926	810	
Colorado.....	2	2	2	2	1	1	1	1	3	3	3	2	2	3	3	55	164	80	106	369	369	810	
Southern Ute.....	1	1	1	1	1	1	1	1	3	3	3	2	2	3	3	55	164	80	106	369	369	810	
Ute Mountain.....	1	1	1	1	1	1	1	1	3	3	3	2	2	3	3	55	164	80	106	369	369	810	
Florida: Seminole.....	25	25	25	1	1	1	1	1	20	20	1	1	1	1	1	1	250	20	60	60	60	60	
Idaho.....	7	43	4	46	1	14	3	6	6	49	8	12	14	1,080	2,133	1,586	4,143	1,586	4,143	1,079	1,079	1,079	
Coeur d'Alene.....	1	6	7	7	6	1	5	21	5	10	6	10	8	829	483	386	829	483	386	829	112	112	
Fort Hall.....	4	14	1	17	5	2	2	28	2	6	2	6	2	404	550	550	1,764	45	45	45	45	45	
Fort Lapwai.....	2	23	3	22	1	3	1	1	1	2	2	2	2	676	1,100	650	1,560	650	1,560	922	922	922	
Iowa: Sac and Fox.....	10	10	10	10	3	3	3	3	3	3	1	1	1	25	60	65	200	65	200	200	200	200	

	17	17	17	1	7	2	3	1	5	180	25	1,064	919	1,414	1,313	599
Kansas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kekapoo.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Potawatomi.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan: Machine <sup>1</sup>	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minnesota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fon du Lac.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Portage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leech Lake.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Net Lake.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pepesone (Birch Cooley)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Red Lake.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
White Earth.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blackfoot.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Crow.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flathead.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Belknap.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Peck.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rocky Boy's Agency.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gunge River.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebraska <sup>1</sup> .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Winnebago.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nevada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fallon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort McDermitt.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moapa River.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nevada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Walker River.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Western Shoshone.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Reno, special.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jicarilla.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mesquero.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pueblo Bonito.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pueblo day schools.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Juan.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zuni.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Estimated.  
<sup>2</sup> Santee not included, now under Yankton, S. Dak.

<sup>3</sup> Under State jurisdiction.  
<sup>4</sup> Unknown.

<sup>5</sup> No record.  
<sup>6</sup> 1917 report.

<sup>7</sup> Not reported.  
<sup>8</sup> 1916 report.

TABLE 4.—Marriages, missionaries, churches, English language, dress, citizenship, crimes, misdemeanors, etc., June 30, 1918—Continued.

States and superintendencies.	Marriages.				Plural marriages existing June 30, 1918.	Crimes.		Misdemeanors.		Arrests for drunkenness.		Missionaries working among Indians.		Church-going Indians.		Indians who—					
	Between Indians and whites.	Between Indians.	By tribal custom.	By legal procedure.		By Indians.	By whites.	By Indians.	By whites.	Indians.	Whites.	Protestant.	Catholic.	Churchees among Indians.	Protestant.	Catholic.	Speak English lan- guage.	Read and write English language.	Wear clothing.	Are citizens of the United States.	Are voters.
New York: New York Agency.....												4	1	15	1,2,912	1,448	5,982	5,982	5,982	271	75
North Carolina: Cherokee.....		19		19		1						1		11	1,400		1,896	1,280	2,343	2,343	579
North Dakota.....	8	52	10	50	9	26			12		11	16	34	1,649	5,716	5,000	2,850	8,940	6,405	2,263	
Fort Berthold.....	2	12	9	15							5	2	9	315	725	800	500	1,204	1,204	301	
Fort Totten.....	1	1	10		2						6	8	5	300	600	400	1,963	1,963	267		
Standing Rock.....	1	6	7	3	20	20	8				2		17	875	1,400	750	3,455	3,455	972		
Turtle Mountain.....	4	24	28		7	3					1	2	3	159	3,139	2,000	1,200	3,268	763		
Oklahoma.....	29	110	15	124	16	38	54	379	228	187	44	4	55	2,115	1,780	12,869	9,845	15,779	17,242	3,784	
Cantonment.....	10			10					1		3		3	117	416	363	700	780	213		
Cheyenne and Arapaho.....	2	23	3	22	2	11			16		4		4	555	826	480	1,262	1,262	337		
Kiowa.....	6	21		26		10	5	40	12		11	2	13	1,000	400	2,500	3,500	4,883	200		
Ogawa.....	8	6		14		27	47	339	143	187	2	2	22	1,250	600	1,910	1,840	2,186	576		
Otoe.....	2	2		2			1		4		2			217	456	444	624	624	116		
Pawnee.....	4	4		4					15		2		1	200	600	450	715	624	131		
Ponca.....	8	8		8							2			100	834	670	1,030	1,026	267		
Sac and Fox.....	9	8		6		1					2		3	48	598	365	1,063	1,063	154		
Sag and Fox.....	11	11		10					7		11		3	328	275	200	747	747	206		
Seeger.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	2		2	(1)	(1)	1,707	1,118	1,707	1,707	172	
Seneca.....	14	16	8	22					30		2		2	(1)	(1)	2,738	2,535	3,016	3,038	863	
Shawnee.....											6	2	9	1,068	726	8,675	3,631	10,998	4,863	4,281	
Oregon.....	12	39	2	50	11	1	61		14	4	6	2	9	1,068	726	8,675	3,631	10,998	4,863	4,281	
Klamath.....	1	9		10	9	1	47		8		2		2	308	1,130	576	1,160	8	8	8	
Roseburg.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)		(1)	(1)	(1)	(1)	(1)	(1)	(1)	6,000	2,000	3,000	3,000	3,000	
Umatilla.....	13	16	2	26			8		6	3	1	1	2	110	160	240	445	445	445	445	
Warm Springs.....	10	10		10		1					1	1	2	350	675	370	570	580	580	580	

Pennsylvania: Carlisle.	14	183	4	203	2	20	11	190	5	4	3	117	28	170	14,312	8,825	307	789	789	9,010	789	6,384	4,000	
South Dakota																								
Cheyenne River		2	30		32	2	1	20				4	1	30	1,712	1,133	1,203	1,085	2,845	282	282			
Grow Creek			8		6			6	1			2	2	10	705	215	705	160	705	84	282			
Headwaters			8		6			6				2	2	10	705	215	705	160	705	84	282			
Lower Brule								6	4			1	1	7	386	137	372	230	513	95	95			
Pierre												1	1	7	386	137	372	230	513	95	95			
Pine Ridge		1	43		44		10	8	70		2	42	16	23	3,800	3,250	6,000	3,000	7,340	545	545			
Pinebluff		6	40		46		3	6	60			31	3	42	2,900	2,900	2,000	1,600	5,336	1,308	1,308			
Sioux		6	24	4	26		5	2	1		4	13	1	11	3,724	3,724	2,000	1,600	5,336	1,308	1,308			
Siouxton		6	24	4	26		5	2	1		4	13	1	11	3,724	3,724	2,000	1,600	5,336	1,308	1,308			
Yankton		34			34		5	22				21	3	16	1,625	1,625	1,400	1,000	2,280	3,117	775			
Utah		1	32	24	9		7			3	9			4	208			863	269	1,149	479			
Goshute			4		4		7					6			105			423	106	423	129			
Shoshone			4		4		7					6			105			423	106	423	129			
Ute and Ouray		1	24	23	2				3			2		1	30			310	120	600	1,163	1,350		
Washington		15	68		83		13	1	69	22	42	9	9	38	1,730	2,778	9,086	6,594	11,130	7,918	768			
Colville		4	13		17		11	1	9	1		1	3	12	10	920	1,700	1,090	2,666	855	89			
Cushman		1	6		7							1	4	2	406	267	1,828	1,017	1,940	465	10			
Neah Bay		2	10		12			6		2		1	2	2	355	3	440	367	682	682	10			
Spokane		2	3		5		1			1	3		1	3	4	200	260	500	200	604	76	76		
Taholah		1	3		5							1	3	4	75		682	323	783	13	13			
Tulalip		1	13		13		1	24		3		1	3	3	34	1,038	1,136	837	1,363	1,363	41			
Yakima		5	20		26		30	30	20	30		1	1	6	660		2,800	2,800	3,000	3,000	75			
Wisconsin		16	98	39	76		3	110	34	72	16	20	24	21	3,126	3,421	7,132	5,430	9,666	4,335	1,516			
Grand Rapids			40	32	8			1		15		2			170	440	30	1,000	700	1,372	1,242			
Hayward												1	1	2	160	800	440	800	700	1,276	1,276			
Keshena		5	24	29	2			40		21		1	4	5	1,500	1,300	1,000	1,000	1,788	1,788	28			
Lac du Flambeau			4	2	2		3			4	1	1	1	2	84	1,112	619	465	744	184	184			
Laona			6	6	1							3	1	1	88		88	75	355	355				
La Pointe		10	8	18	3			66	34	25	15	6	13	3	203	650	800	500	1,064	630	630			
Oahe				12	18							7	3	6		2,000	1,000	1,000	1,000	2,610	728			
Red Cliff		1	4		5			3		7			2	3		500	537	500	537	267	267			
Wyoming: Shoshone.		1	18	19			2	9		7		11	13	17	862	475	1,080	850	1,666		75			

Estimated. 1917 report. Unknown. Not reported. Includes Santee, formerly listed under Nebraska. Does not include Ponca Indians.



TABLE 5.—Area of Indian lands June 30, 1918.

States and reservations.	Number allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
Grand total.....	224,133	36,880,634	34,233,174	71,003,808
Total reservations.....	216,400	35,751,792	34,233,174	69,984,966
Total public domain.....	7,724	1,108,842	.....	1,108,842
Arizona.....	1,758	81,639	18,571,876	18,653,014
Camp McDowell (Salt River).....	.....	.....	24,971	24,971
Cocopah.....	.....	.....	400	400
Colorado River.....	603	6,029	234,670	240,699
Fort Apache.....	.....	.....	1,681,920	1,681,920
Fort Mojave (Colorado River).....	.....	.....	31,328	31,328
Gila Bend (Pima).....	.....	.....	10,231	10,231
Gila River (Pima).....	.....	.....	371,422	371,422
Havasupai (Suppai).....	.....	.....	518	518
Hualapai (Truxton Canon).....	.....	.....	730,940	730,940
Kaibab.....	.....	.....	128,240	128,240
Moqui (Hopi).....	.....	.....	2,472,320	2,472,320
Navajo (see New Mexico and Utah).....	60	9,600	8,774,397	8,783,997
Papago.....	.....	.....	2,129,114	2,129,114
Papago (San Xavier).....	291	41,608	114,348	155,954
Salt River.....	804	24,404	22,316	46,720
San Carlos.....	.....	.....	1,834,240	1,834,240
California.....	2,598	82,172	434,866	517,038
Digger.....	.....	.....	530	530
Hoopa Valley.....	639	29,001	99,051	128,142
Mission—	.....	.....	.....	.....
Agua Caliente (Malki).....	.....	.....	7,208	7,208
Augustine (Malki).....	.....	.....	616	616
Cabazon (Malki).....	.....	.....	1,280	1,280
Cahuilla (Soboba).....	.....	.....	18,886	18,886
Campo.....	.....	.....	1,640	1,640
Capitan Grande (Paia).....	.....	.....	15,086	15,086
Cuyapiipa (Campo).....	.....	.....	4,080	4,080
Inaja (Soboba).....	.....	.....	780	780
Laguna (Campo).....	.....	.....	320	320
La Posta (Campo).....	.....	.....	3,679	3,679
Los Coyotes (Soboba).....	.....	.....	21,520	21,520
Mamzanita (Campo).....	.....	.....	19,680	19,680
Martinez (Malki).....	.....	.....	1,280	1,280
Mesa Grande (Soboba).....	.....	.....	4,400	4,400
Mission Creek (Malki).....	.....	.....	1,920	1,920
Morongo (Malki).....	.....	.....	11,089	11,089
Paia.....	177	1,386	3,084	4,480
Pechanga or Temecula (Paia).....	86	1,299	3,896	5,195
Potrero or La Jolla (Paia).....	.....	.....	8,329	8,329
Ramona (Soboba).....	.....	.....	580	580
Rincon (Paia).....	.....	.....	2,554	2,554
San Manuel (Malki).....	.....	.....	653	653
San Pasqual (Paia).....	.....	.....	2,200	2,200
Santa Rosa (Soboba).....	.....	.....	2,560	2,560
Santa Ynez (Soboba).....	.....	.....	120	120
Santa Ysabel (Soboba).....	.....	.....	15,042	15,042
Soboba.....	.....	.....	5,461	5,461
Syquan (Paia).....	17	270	370	640
Torres (Malki).....	.....	.....	20,800	20,800
Tuolumne.....	.....	.....	34	34
Twenty-nine Palms (Malki).....	.....	.....	480	480
Palute.....	.....	.....	75,806	75,806
Round Valley.....	877	42,106	.....	42,106
Tule River.....	.....	.....	48,551	48,551
Yuma (Fort Yuma).....	798	8,010	31,376	39,386
Colorado.....	372	72,731	396,143	468,874
Ute (Ute Mountain and Southern Ute).....	371	72,651	396,143	468,794
Absentee Wyandot.....	1	80	.....	80
Florida: Seminole.....	.....	.....	23,542	23,542
Idaho.....	4,377	623,098	54,841	632,939
Coeur d'Alene.....	638	104,077	.....	104,077
Fort Hall.....	1,863	345,209	21,263	366,472
Lapwai (Nez Perce).....	1,876	178,812	33,578	212,390
Iowa: Sac and Fox.....	.....	.....	3,261	3,261

TABLE 5.—Area of Indian lands June 30, 1918—Continued.

States and reservations.	Number allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
Kansas.....	3,079	272,519	.....	272,519
Chippewa and Munsee (Potawatomi).....	100	4,195	.....	4,195
Iowa (Kickapoo).....	143	11,760	.....	11,760
Kickapoo.....	351	27,601	.....	27,601
Potawatomi.....	2,363	220,755	.....	220,755
Sac and Fox (Kickapoo).....	122	8,079	.....	8,079
Michigan.....	2,648	153,227	191	153,418
Isabella.....	1,943	98,395	191	98,581
L'Anse.....	669	52,201	.....	52,206
Ontonagon.....	36	2,631	.....	2,631
Minnesota.....	8,365	954,615	553,898	1,508,513
Bois Fort (Nett Lake).....	712	56,782	.....	56,782
Deer Creek (Nett Lake).....	4	296	.....	296
Fond du Lac.....	595	36,846	.....	36,846
Grand Portage.....	304	24,191	.....	24,191
Leech Lake.....	631	48,820	.....	48,820
Mdewakanton (Birch Cooley).....	135	12,582	.....	12,582
Red Lake.....	.....	.....	543,828	543,828
Vermillion Lake.....	.....	.....	1,080	1,080
White Earth.....	5,157	140,655	9,290	719,955
White Oak Point and Chippewa (Leech Lake).....	826	64,733	.....	64,733
Montana.....	10,001	2,448,126	3,479,270	5,927,396
Blackfoot.....	2,656	889,199	604,188	1,493,387
Crow.....	2,451	481,269	1,831,944	2,313,213
Fort Belknap.....	.....	.....	497,600	497,600
Fort Peck.....	2,466	849,250	.....	849,250
Jocko (Flathead).....	2,428	228,408	.....	228,408
Northern Cheyenne (Tongue River).....	.....	.....	489,500	489,500
Rocky Boy.....	.....	.....	86,038	86,038
Nebraska.....	4,037	353,424	6,118	359,542
Omaha.....	1,480	130,642	4,380	135,022
Ponca (Santee).....	168	37,236	.....	37,236
Santee (Niobrara).....	350	73,261	.....	73,261
Sioux (additional).....	.....	.....	640	640
Winnebago.....	1,559	122,286	1,098	123,383
Nevada.....	979	14,123	721,477	735,610
Duck Valley (Western Shoshone).....	.....	.....	321,920	321,920
Moapa River.....	117	605	523	1,128
Painte (Fallon).....	366	3,650	690	4,640
Pyramid Lake (Nevada).....	.....	.....	322,000	322,000
Walker River.....	496	9,878	75,204	85,082
Winnemucca.....	.....	.....	840	840
New Mexico.....	2,800	673,175	4,094,049	4,667,224
Jicarilla Apache.....	796	353,812	407,300	761,112
Mescalero Apache.....	.....	.....	474,240	474,240
Navajo (see Arizona and Utah).....	2,004	319,363	1,980,687	2,300,000
Pueblo—	.....	.....	.....	.....
Acoma (Albuquerque).....	.....	.....	95,792	95,792
Cochiti.....	.....	.....	24,256	24,256
Isleta (Albuquerque).....	.....	.....	110,080	110,080
Jemez.....	.....	.....	42,359	42,359
Laguna (Albuquerque).....	.....	.....	101,511	101,511
Laguna withdrawal <sup>1</sup> .....	.....	.....	160,000	160,000
Nambe.....	.....	.....	13,586	13,586
Picuris.....	.....	.....	17,461	17,461
Pojoaque.....	.....	.....	13,520	13,520
San Dia (Albuquerque).....	.....	.....	24,187	24,187
San Juan.....	.....	.....	17,545	17,545
San Felipe (Albuquerque).....	.....	.....	34,767	34,767
Santa Ana (Albuquerque).....	.....	.....	17,361	17,361
Santa Clara.....	.....	.....	49,369	49,369
Santo Domingo.....	.....	.....	92,398	92,398
Sia.....	.....	.....	17,515	17,515
San Ildefonso.....	.....	.....	17,293	17,293
Taos.....	.....	.....	17,361	17,361
Testuque.....	.....	.....	17,471	17,471
Zuni.....	.....	.....	288,040	288,040

<sup>1</sup> Includes 12,348 acres purchased from the Omaha Indians.

<sup>2</sup> Executive orders 1910 and 1917.

TABLE 5.—Area of Indian lands June 30, 1918—Continued.

States and reservations.	Number allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
New York.....			87,677	87,677
Allegany.....			30,469	30,469
Cattaraugus.....			21,680	21,680
Oil Spring.....			640	640
Onesida.....			350	350
Onondaga.....			6,100	6,100
St. Regis.....			14,640	14,640
Tonawanda.....			7,549	7,549
Tuscarora.....			6,249	6,249
North Carolina: Qualla.....			63,211	63,211
North Dakota.....	8,380	2,005,320	100,000	2,105,320
Devils Lake (Fort Totten).....	1,189	137,381		137,381
Fort Berthold.....	2,165	435,708	100,000	535,708
Standing Rock.....	4,700	1,888,411		1,888,411
Turtle Mountain.....	326	43,820		43,820
Oklahoma.....	116,701	19,548,888	15,361	19,564,249
Cherokee.....	40,193	4,346,203	30	4,346,233
Chickasaw.....	10,955	3,800,350	10	3,800,360
Choctaw.....	26,728	4,291,086	14,460	4,305,496
Creek.....	18,710	2,997,114	352	2,997,466
Seminole.....	3,118	359,535	122	359,657
Cherokee Outlet.....	62	4,949		4,949
Cheyenne and Arapaho.....	3,331	528,789		528,789
Iowa (Sac and Fox).....	106	8,605		8,605
Kansas (Kaw now Ponca).....	247	99,644		99,644
Kickapoo (Shawnee).....	230	22,650		22,650
Kiowa, Comanche, and Apache.....	3,451	547,236		547,236
Modoc (Seneca).....	68	3,966		3,966
Oakland (Ponca).....	73	11,456		11,456
Osage.....	2,320	1,465,350		1,465,350
Otoe.....	514	128,351		128,351
Ottawa (Seneca).....	160	12,995		12,995
Pawnee.....	820	112,701		112,701
Peoria (Seneca).....	218	43,334		43,334
Ponca.....	782	100,745	387	101,132
Potawatomi (Shawnee).....	2,109	291,736		291,736
Quapaw (Seneca).....	248	56,245		56,245
Sac and Fox.....	548	87,684		87,684
Seneca.....	435	41,813		41,813
Shawnee.....	117	12,745		12,745
Wichita (Kiowa).....	957	152,714		152,714
Wyandotte (Seneca).....	244	20,942		20,942
Oregon.....	4,253	508,667	1,209,349	1,718,006
Grande Ronde (Siletz).....	269	32,983		32,983
Klamath.....	1,351	208,279	812,707	1,020,986
Siletz.....	551	44,459		44,459
Umatilla.....	1,115	82,644	74,130	156,774
Warm Springs.....	967	140,292	322,512	462,804
South Dakota.....	27,377	6,259,958	408,714	6,668,672
Cheyenne River.....	3,686	992,681	218,149	1,210,830
Crow Creek and Old Winnebago.....	1,460	272,500		272,500
Lake Traverse (Sisseton).....	2,006	306,838		306,838
Lower Brule.....	868	201,991	24,000	225,991
Pine Ridge.....	8,257	2,368,818	161,565	2,529,378
Rosebud.....	8,487	1,851,812		1,851,812
Yankton.....	2,613	268,263		268,263
Utah.....	1,367	111,947	1,529,360	1,641,307
Goshute and Deep Creek.....			34,500	34,500
Navajo (see Arizona and New Mexico).....			600,000	600,000
Paite (Navajo).....			600,000	600,000
Shivwits.....			26,880	26,880
Skull Valley.....			18,640	18,640
Utah Valley.....	777	89,630	249,340	288,960
Uncompahgre.....	590	72,327		72,327

TABLE 5.—Area of Indian lands June 30, 1918—Continued.

States and reservations.	Number allotments.	Area in acres.		
		Allotted.	Unallotted.	Total.
Washington.....	9,960	1,019,079	1,609,807	2,718,886
Chehalis (Cushman).....	36	3,799	.....	3,799
Columbia (Colville).....	35	22,618	.....	22,618
Colville.....	2,918	332,796	1,009,580	1,342,376
Hoh River (Neah Bay).....	.....	.....	840	840
Kalispel (Coeur d'Alene).....	.....	.....	4,629	4,629
Lummi (Tulalip).....	109	12,561	.....	12,561
Makah (Neah Bay).....	373	3,728	19,312	23,040
Muckleshoot (Cushman).....	43	3,491	.....	3,491
Nisqualli (Cushman).....	30	4,717	.....	4,717
Ozette (Neah Bay).....	.....	.....	640	640
Port Madison (Tulalip).....	51	7,219	65	7,284
Puyallup (Cushman).....	167	17,463	.....	17,463
Quileute (Neah Bay).....	.....	.....	837	837
Quinalt (Taholah).....	690	54,990	168,553	223,543
Shoalwater (Cushman).....	.....	.....	335	335
Skokomish (Cushman).....	134	7,803	.....	7,803
Snohomiah (Tulalip).....	164	22,166	324	22,490
Spokane.....	628	64,954	82,488	147,442
Squaxon Island (Cushman).....	23	1,494	.....	1,494
Swinomish (Tulalip).....	71	7,359	.....	7,359
Yakima.....	4,488	451,922	412,404	864,326
Wisconsin.....	4,965	319,086	270,734	589,820
Lac Courte Oreille (Hayward).....	881	68,910	540	69,450
Lac du Flambeau.....	600	45,756	24,424	70,180
La Pointe (Bad River).....	1,608	115,808	14,000	129,808
Menominee (Keshena).....	.....	.....	231,680	231,680
Oneida.....	1,504	65,466	.....	65,466
Red Cliff.....	205	14,186	.....	14,186
Stockbridge and Munsee (Keshena).....	167	8,920	.....	8,920
Wyoming: Wind River (Shoshone).....	2,397	245,058	584,940	829,998
Public domain.....	7,724	1,108,842	.....	1,108,842

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
ARIZONA.		
Camp McDowell..... (Under Salt River School.) Tribe: Mohave Apache.	Acres. 24,971	Executive order, Sept. 15, 1903; act of Apr. 21, 1904, vol. 33, p. 211. (See Ann. Rept. 1905, p. 98.)
Cocopah.....	400	Executive order, Sept. 27, 1917, school reserve.
Colorado River <sup>1</sup> ..... (Under Colorado River School.) Tribes: Chemehuevi, Ka-wia, Cocopa, <sup>2</sup> Mohave.	* 226,010	Act of Mar. 3, 1865, vol. 13, p. 559; Executive orders, Nov. 22, 1873, Nov. 16, 1874, and May 15, 1876. (See sec. 25, Indian appropriation act, approved Apr. 21, 1904, vol. 33, p. 224.) Act Apr. 30, 1908 (35 Stat., 77); act Apr. 4, 1910 (36 Stat., 273); act Mar. 3, 1911 (36 Stat., 1063); act Aug. 24, 1912 (37 Stat., 523); Executive order, Nov. 22, 1915. 616 Indians allotted 6,160 acres.
Fort Apache..... (Under Fort Apache School.) Tribes: Chillon, Chiricahua, Coyotero, Mimbreno, and Mogollon Apache.	* 1,681,920	Executive orders, Nov. 9, 1871, July 21, 1874, Apr. 27, 1876, Jan. 26 and Mar. 31, 1877; act of Feb. 20, 1893, vol. 27, p. 499; agreement made Feb. 25, 1896, approved by act of June 10, 1896, vol. 29, p. 368. (See act of June 7, 1897, vol. 30, p. 64.)
Fort Mojave..... (Under Fort Mojave School.) Tribe: Apache.	31,328	Executive orders, Dec. 1, 1910, and Feb. 2, 1911. Sec. 11, act June 25, 1910 (36 Stat., 855-858). (See 18579-1910.) Area original military reservation, 14,000 acres.
Gila Bend..... (Under Pima School.) Tribe: Papago.	* 10,231	Executive orders, Dec. 12, 1882, and Jan. 17, 1909. (See 4108, 1909.)
Gila River..... (Under Pima School.) Tribes: Maricopa and Pima.	* 371,422	Act of Feb. 28, 1859, vol. 11, p. 401; Executive orders, Aug. 31, 1876, Jan. 10, 1879, June 14, 1879, May 5, 1882, and Nov. 15, 1883; Mar. 22, May 8, July 31, 1911; Dec. 16, 1911; June 2, 1912; Aug. 27, 1914; Mar. 18, 1915, and July 19, 1915.

<sup>1</sup> Partly in California.<sup>2</sup> Outboundaries surveyed.<sup>3</sup> Surveyed.<sup>4</sup> Not on reservation.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>ARIZONA—continued.</b>		
Havasupai (Supai)..... (Under Havasupai School.) Tribe: Havasupai.	<i>Acres.</i> 1 518	Executive orders, June 8 and Nov. 23, 1880, and Mar. 31, 1882.
Hopi (Moqui)..... (Under Moqui School.) Tribe: Hopi (Moqui) and Navajo.	2,472,320	Executive order, Dec. 16, 1882. Act of Mar. 1, 1907 (34 Stat. L., 1021.) (See 45000-1910.)
Kaibab..... (Under Kaibab School.) Tribes: Kaibab and San Juan Paiute.	128,940	Secretary's withdrawal, Oct. 15, 1907. (See 73684-1907.) Executive order, June 11, 1913.
Navajo <sup>1</sup> ..... (Under Leupp, Navajo, Western Navajo, San Juan, and Pueblo Board Schools.) Tribe: Navajo.	11,857,703	Treaty of June 1, 1868, vol. 15, p. 667, and Executive orders, Oct. 20, 1878, Jan. 6, 1880, two of May 17, 1884, and Nov. 19, 1892. 1,709,000 acres in Arizona and 967,680 acres in Utah were added to this reservation by Executive order of May 17, 1884, and 46,060 acres in New Mexico restored to public domain, but again reserved by Executive orders, Apr. 24, 1886, Jan. 8, 1900, and Nov. 14, 1901. By Executive orders of Mar. 10 and May 15, 1905, 61,523 acres were added to reservation and by Executive order of Nov. 9, 1907, as amended by Executive order of Jan. 28, 1908, 2,972,160 acres were added. 2,064 Indians have been allotted 328,963 acres under the act of Feb. 8, 1887 (24 Stats., 388), as amended. By Executive orders of Dec. 30, 1908, and Jan. 16, 1911, the surplus lands, approximately 1,641,180 acres, in that part of the extension in New Mexico restored to the public domain. (See 35 Stat. L., 457 and 787.) (See 1277-9.) Act of May 27, 1902 (32 Stat., 264), and Mar. 3, 1913 (37 Stat., 1007), R. R. exchanges. Executive orders May 24, 1911, Feb. 17, 1912 (2), Feb. 10, 1913 (2), May 6, 1913, Dec. 1, 1913, July 23, 1914, and Feb. 19, 1915. Also 94,000 acres set aside temporarily for allotment by Executive order, May 7, 1917.
Papago..... (Under San Xavier School.) Tribe: Papago.	2,443,462	Executive order, July 1, 1874, and act of Aug. 5, 1882, vol. 22, p. 291. 41,006 acres allotted to 291 Indians, and 14 acres reserved for school site, the residue, 27,563 acres, unallotted. (See letter book 208, p. 408.) Executive orders, June 16, 1911, and May 28, Sept. 2, Oct. 8, and Dec. 5, 1912, Oct. 27, 1914, Jan. 14, 1916, and Feb. 1, 1917.
Salt River..... (Under Salt River School.) Tribes: Maricopa and Pima.	22,317	Executive orders, June 14, 1879, and Oct. 20, 1910; Sept. 28 and Oct. 23, 1911. (See 26731-1910.) (See Senate Doc. 90, 58th Cong., 2d sess.) 804 Indians allotted 24,403 acres under general allotment act.
San Carlos..... (Under San Carlos School.) Tribes: Arivaipa, Chillon, Chiricahua, Coyotero, Mimbreno, Mogollon, Mohave, Pinal, San Carlos, Tonto, and Yuma Apache.	1 1,834,240	Executive orders, Nov. 9, 1871, Dec. 14, 1872, Aug. 5, 1873, July 21, 1874, Apr. 27 and Oct. 30, 1876, Jan. 26 and Mar. 31, 1877; act of Feb. 20, 1893, vol. 27, p. 446; agreement made Feb. 25, 1898, approved by act of June 10, 1898, vol. 30, p. 358. (For fuller text see Misc. Indian Doc., vol. 39, p. 35910.) (See act of June 7, 1897, vol. 30, p. 64; act of Mar. 2, 1901, vol. 31, p. 952.) Executive order of Dec. 22, 1902.
Walapai..... (Under Truxton Cañon School.) Tribe: Walapai.	780,940	Executive orders, Jan. 4, 1883, Dec. 22, 1898, May 14, 1900, June 2, 1911, May 29, 1912, and July 18, 1913.
Total.....	21,886,112	
<b>CALIFORNIA.</b>		
Camp or Fort Independence...	300	Executive orders, Oct. 28, 1915, and Apr. 20, 1916.
Cold Springs.....	160	Executive order, Nov. 10, 1914.
Colony or Nevada.....	75	Executive order, May 6, 1913.
Digger..... (Under a farmer.) Tribe: Digger.	370	Act of Mar. 3, 1893 (27 Stats., 612), provides for purchase of 330 acres; not allotted. 40 acres were reserved by order of the Secretary of the Interior, Oct. 28, 1903, for Digger Indians. (See 45597-1907, 71861-1908, 39245-1909.)
Fort Bidwell.....	320	Executive order, Aug. 8, 1917, school reserve.
Gudiville band.....	100	Secretary's withdrawal for wood lot. (See 22266-1906.)
Hoopa Valley..... (Under Hoopa Valley School.) Tribes: Hunsatung, Hu-pa, Klamath River, Miskut, Redwood, Selas, Sermalton, and Tishatanatan.	1 90,051	Act of Apr. 8, 1864, vol. 13, p. 39; Executive orders, June 23, 1876, and Oct. 16, 1891. There have been allotted to 630 Indians 29,143.38 acres, reserved to 3 villages 68.74 acres, and opened to settlement under act of June 17, 1892 (27 Stats., p. 52), 15,096.11 acres of land (formerly Klamath River Reservation). (Letter book 263, p. 96; 382, p. 480; 383, p. 170.)

<sup>1</sup> Outboundaries surveyed.<sup>2</sup> Partly in New Mexico. (See Table 5.)<sup>3</sup> Partly surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>CALIFORNIA—continued.</b>		
Mission (28 reserves)..... (Under Martinez, Soboba, Pechanga, Malki, Campo and Volcan Schools.) Tribes: Diegueno, Kawia, San Luis Rey, Serranos, and Temecula.	Acres. 181,844	Executive orders, Jan. 31, 1870, Dec. 27, 1875, May 15, 1876, May 3, Aug. 25, Sept. 29, 1877, Jan. 17, 1880, Mar. 2, Mar. 9, 1881, June 27, July 24, 1882, Feb. 5, June 19, 1883, Jan. 25, Mar. 22, 1886, Jan. 29, Mar. 14, 1887, and May 6, 1889. 270.24 acres allotted to 17 Indians and for church and cemetery purposes on Syquan Reserve (letter book 303, p. 297), and 1,299.47 acres allotted to 85 Temecula Indians, 2.70 acres reserved for school purposes (letter book 351, p. 312). Executive order, Dec. 29, 1891. Proclamations of President of Apr. 16, 1901, vol. 32, p. 1970, and May 29, 1902, vol. 32, p. 2006; act of Feb. 11, 1903, vol. 32, p. 822. 174,936.73 acres patented by the Government to various bands under acts of Jan. 12, 1891 (26 Stat. L., 712), and Mar. 1, 1907 (34 Stat. L., 1015-1022). (See misc. tract book 36, and President's proclamation, Aug. 31, 1915.) See Ex. Ords. Aug. 16, 1917; Jan. 26, 1918, extending trust periods 10 years.
Chuckekansies.....	160	Executive orders, Apr. 24, 1912, and Aug. 14, 1914.
Los Coyotes.....	3,840	Executive order, Apr. 13, 1914.
Morongo.....		Proclamation of Nov. 12, 1913, partly canceling Executive order withdrawal.
Palute.....	175,806	Executive orders, Mar. 11, 1912, May 9, 1912, Sept. 7, 1912, Sept. 16, 1912, Feb. 14, 1913, and July 22, 1915.
Pala..... (Formerly Warner's Ranch Indians.)		119.99 acres allotted to 15 Indians (letter book 303, p. 57). 162 allotments of approximately 2 acres of irrigable land and 6 acres of grazing land approved and patented under act of Feb. 8, 1887 (24 Stat. L., 388), as amended. Lands reserved under authority of acts of Jan. 12, 1891 (26 Stat. L., 712), and Mar. 1, 1907 (34 Stat. L., 1022), and bought under act of May 8, 1902 (32 Stat. L., 257). See authority 7971 and letter book 580, p. 113. Deed recorded in Miscellaneous Record Book No. 5, p. 193.
Round Valley..... (Under Round Valley School.) Tribes: Clear Lake, Concow, Little Lake, Nomelaki, Pit River, Potter Valley, Redwood, Wallaki, and Yuki.		Acts of Apr. 8, 1864, vol. 13, p. 39, and Mar. 3, 1873, vol. 17, p. 634; Executive orders, Mar. 30, 1870, Apr. 8, 1873, May 18, 1875, and July 26, 1876; act of Oct. 1, 1890, vol. 26 p. 658. 42, 105.56 acres allotted to 1,034 Indians, 1,110 acres reserved for school and agency purposes (72068-1907, letter books 298, p. 17, and 395, p. 260). (See act of Feb. 8, 1905, providing for a reduction of area of reservation, vol. 33, p. 706.) 36,692.23 acres additional allotments made to 619 Indians and 740 acres reserved for school purposes.
Tule River..... (Under Tule River School.) Tribes: Kawia, <sup>1</sup> Kings River, Moache, Tehon, Tule, and Wichumni. <sup>2</sup>	48,551	Executive orders, Jan. 9 and Oct. 3, 1873, and Aug. 3, 1878.
Yuma..... (Under Fort Yuma School.) Tribe: Yuma-Apache.	30,949	Executive order, Jan. 9, 1884; agreement, Dec. 4, 1893, ratified by act of Aug. 15, 1894, vol. 28, p. 332. (See sec. 25, Indian appropriation act, approved Apr. 21, 1904, vol. 33, p. 224.) 7,756.54 acres irrigable land opened under act of June 17, 1902 (32 Stats., 388), act Mar. 3, 1911 (36 Stats., 1063). 8,110 acres allotted to 811 Indians.
Total.....	441,646	
<b>COLORADO.</b>		
Ute <sup>3</sup> ..... (Under Navajo Springs and Southern Ute Schools.) Tribes: Capote, Moache, and Wiminuche Ute.	396,143	Treaties of Oct. 7, 1863, vol. 13, p. 673, and Mar. 2, 1868, vol. 15, p. 619, act of Apr. 29, 1874, vol. 18, p. 36; Executive orders, Nov. 22, 1875, Aug. 17, 1876, Feb. 7, 1879, and Aug. 4, 1882, and act of Congress approved June 15, 1890, vol. 21, p. 199, and July 28, 1892, vol. 22, p. 178, May 14, 1884, vol. 23, p. 22, Aug. 15, 1894, vol. 28, p. 357, Feb. 20, 1896, vol. 28, p. 677. 72,651 acres allotted to 371 Indians and 360 acres reserved for use of Government (letter book 321, p. 86); also 7,360.32 acres allotted to 39 Indians (letter book 331, p. 396). 523,079 acres opened to settlement by President's proclamation dated Apr. 13, 1899 (31 Stats., 1947). The residue, 375,960 acres, retained as a reservation for the Wiminuche Utes. Act June 30, 1913 (38 Stat., 82), exchange of lands with Indians. Executive order, Nov. 12, 1915.
Total.....	396,143	

<sup>1</sup>Partly in Nevada.

<sup>2</sup>Not on reservation.

<sup>3</sup>Partly in New Mexico.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>FLORIDA.</b>		
Seminole..... (Under special agent.)	<sup>1</sup> 26,741	Acts Aug. 15, 1894 (28 Stats., 303), Mar. 2, 1895 (28 Stat., 892), June 10, 1896 (29 Stat., 337), June 7, 1897 (30 Stat., 78), Mar. 1, 1899 (30 Stat., 938), June 6, 1900 (31 Stat., 302), Apr. 4, 1910 (36 Stat., 274). 23,061.72 acres purchased for Seminole Indians in Florida under acts mentioned (see Annual Report for 1900, p. 101). 3,680 acres reserved by Executive order of June 28, 1911. (See 20817-1909.)
Total.....	26,741	
<b>IDAHO.</b>		
Coeur d'Alene..... (Under Coeur d'Alene Agency.) Tribes: Coeur d'Alene, Kutenai, <sup>1</sup> Pend d'Oreille, <sup>1</sup> and Spokane.		Executive orders June 14, 1867, and Nov. 8, 1873; agreements made Mar. 26, 1887, and Sept. 9, 1889, and confirmed in Indian appropriation act approved Mar. 3, 1891, vol. 26, pp. 1026, 1029. Agreement, Feb. 7, 1894, ratified by act of Aug. 15, 1894, vol. 28, p. 322. 638 Indians have been allotted 104,077 acres and 1,906.99 acres have been reserved for agency, school, and church purposes and for mill sites. (See 80950-1908, and acts of June 21, 1906 (34 Stat. L., 325-356), Mar. 3, 1891 (26 Stat. L., 1026-1029), Aug. 15, 1894 (28 Stat. L., 322), Mar. 27, 1908 (35 Stat. L., 56), Apr. 30, 1909 (35 Stat. L., 78). President's proclamation issued May 22, 1909, opening 224,210 acres surplus lands to settlement. (37 L. D., 698.)
Fort Hall..... (Under Fort Hall School.) Tribes: Bannock and Shoshoni.	<sup>1</sup> 21,263	Treaty of July 3, 1868, vol. 15, p. 673; Executive orders, June 14, 1867, and July 30, 1869; agreement with Indians made July 18, 1881, and approved by Congress July 3, 1882, vol. 22, p. 148; agreement of May 27, 1887, ratified by acts of Sept. 1, 1888, vol. 25, p. 452, Feb. 23, 1889, vol. 25, p. 687, and Mar. 3, 1891, vol. 26, p. 1011. Agreement made Feb. 5, 1898, ratified by act of June 6, 1900, vol. 31, p. 672, ceding 416,000 acres, of which 6,298.72 acres have been allotted to 79 Indians (see letter book 527, p. 478); remainder of ceded tract opened by settlement June 17, 1902 (President's proclamation of May 7, 1902, vol. 32, p. 1907) act of Mar. 30, 1904, vol. 33, p. 153, act of Mar. 3, 1911 (36 Stat., 1064); 1,863 allotments, covering 338,909 acres, approved Oct. 28, 1914 (37106-13).
Lapwai..... (Under Fort Lapwai School.) Tribe: Nez Perce.	34,190	Treaty of June 9, 1863, vol. 14, p. 647; agreement, May 1, 1893, ratified by act of Aug. 15, 1894, vol. 28, p. 326. 178,312 acres allotted to 1,876 Indians, 2,170.47 acres reserved for agency, school, mission, and cemetery purposes, and 32,020 acres of timberland reserved for the tribe; the remainder restored to public settlement. (President's proclamation, Nov. 8, 1895, 29 Stats., 873.)
Lemhi.....		Unratified treaty of Sept. 24, 1868, and Executive order, Feb. 12, 1875; agreement of May 14, 1880, ratified by act of Feb. 23, 1889, vol. 25, p. 687. (See 34 Stat. L., 335, and agreement executed Dec. 28, 1906, approved by President Jan. 27, 1906.) Act of June 21, 1906 (34 Stat., 334), about 64,000 acres opened in 1909. (See 36809-1909.)
Total.....	55,453	
<b>IOWA.</b>		
Sauk and Fox..... (Under Sac and Fox Agency.) Tribes: Potawatomi, Sauk and Fox of the Mississippi, and Winnebago.	3,480	By purchase. (See act of Mar. 2, 1867, vol. 14, p. 507.) Deeds 1857, 1865, 1867, 1868, 1869 1876, 1880, 1882, 1883, 1888, June, July, and Oct., 1892-1896. (See act of Feb. 13, 1891, vol. 26, p. 749.) (See Ann. Repts., 1891, p. 681; 1896, p. 81.) Deeds recorded, vol. 6. (See 95856-1907.)
Total.....	3,480	
<b>KANSAS</b>		
Chippewa and Munsee..... (Under Potawatomi School.) Tribes: Chippewa and Munsee.		Treaty of July 16, 1859, vol. 12, p. 1105. 4,195.31 acres allotted to 100 Indians; the residue, 300 acres, allotted for missionary and school purposes. Patents issued to allottees; balance of allotments sold and proceeds paid to heirs. (See ninth section of act of June 7, 1897, vol. 30, p. 92; L. B., 332, p. 63.)

<sup>1</sup> Surveyed.<sup>2</sup> Not on reservation.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>KANSAS—continued.</b>		
Iowa <sup>1</sup> . (Under Kickapoo School.) Tribe: Iowa.	Acres.	Treaties of May 17, 1854, vol. 10, p. 1099, and of Mar. 6, 1861, vol. 12, p. 1171. 11,768.77 acres of land allotted to 143 Indians; 162 acres reserved for school and cemetery purposes. (Letter book 266, p. 86.) Acts Mar. 3, 1855 (23 Stat., 552), and Jan. 26, 1857 (34 Stat., 367).
Kickapoo. (Under Kickapoo School.) Tribe: Kickapoo.		Treaty of June 28, 1862, vol. 13, p. 623. 27,691.27 acres allotted to 351 Indians; 245 acres reserved for church and school; the residue, 266.57 acres, unallotted (letter books 804, p. 490, and 772, p. 54). (Acts of Aug. 4, 1886 (24 Stat., 219), Feb. 28, 1899, vol. 30, p. 909, and Mar. 3, 1903, vol. 32, p. 1007.)
Potawatomi. (Under Potawatomi School.) Tribe: Prairie Band of Potawatomi.		Treaties of June 5, 1846, vol. 9, p. 853; of Nov. 15, 1861, vol. 12, p. 1191; treaty of relinquishment, Feb. 27, 1867, vol. 15, p. 531. 220,785 acres allotted to 2,363 Indians; 219 acres reserved for school and agency, and 1 acre for church. (Acts of Feb. 28, 1899, vol. 30, p. 909, and Mar. 3, 1903, vol. 32, p. 1007.) 960 acres surplus tribal land sold under act Feb. 28, 1899. Executive order Nov. 12, 1917, extending trust period 10 years, except in 11 cases.
Sauk and Fox <sup>1</sup> . (Under Kickapoo School.) Tribe: Sauk and Fox of the Missouri.		Treaties of May 18, 1854, vol. 10, p. 1074, and of Mar. 6, 1861, vol. 12, p. 1171; acts of June 10, 1872, vol. 17, p. 391, and Aug. 15, 1876, vol. 19, p. 208. 2,843.97 acres in Kansas, 4,194.33 acres in Nebraska, aggregating 7,038.30 acres, allotted to 84 Indians, and under act June 21, 1906 (34 Stat., 324-349), 960.91 acres were allotted to 37 Indians, leaving 57 acres unallotted. (Letter books 233, p. 361; 383, p. 37; and 512, p. 110.)
Total.....		
<b>MICHIGAN.</b>		
Isabella <sup>2</sup> . Tribe: Chippewa of Saginaw, Sagan Creek, and Black River.	191	Executive order, May 14, 1855; treaties of Aug. 2, 1855, vol. 11, p. 633, and of Oct. 18, 1864, vol. 14, p. 657. 98,860 acres allotted to 1,943 Indians.
L'Anse. (Under special agent.) Tribe: L'Anse and Vieux Desert Bands of Chippewa of Lake Superior.		Treaty of Sept. 30, 1854, vol. 10, p. 1109. 52,121 acres allotted to 668 Indians. Payment for lands in sec. 16, see 93879-1907. Unappropriated tracts, see 10293-1915.
Ontonagon. (Under special agent.) Tribe: Ontonagon Band of Chippewa of Lake Superior.		Sixth clause, second article, treaty of Sept. 30, 1854, vol. 10, p. 1109; Executive order, Sept. 25, 1855. 2,561.35 acres allotted to 35 Indians.
Ottawa and Chippewa.....		Treaty July 31, 1855. (11 Stat., 621.) 120,470 acres allotted to 1,818 Indians.
Total.....	191	
<b>MINNESOTA.</b>		
Bois Fort. (Under Nett Lake School.) Tribe: Bois Fort Chippewa.		Treaty of Apr. 7, 1856, vol. 14, p. 765; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 63.) 56,467.20 acres allotted to 721 Indians and 434.63 acres reserved for agency, etc., purposes. (L. B. 359,382); residue, 51,863 acres, opened to public settlement.
Deer Creek. (Under Nett Lake School.) Tribe: Bois Fort Chippewa.		Executive order, June 30, 1883; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 63.) 295.55 acres allotted to 4 Indians; residue, 22,744 acres, opened to public settlement. (Executive order of Dec. 21, 1858.)
Fond du Lac. (Under Fond du Lac School.) Tribe: Fond du Lac Band of Chippewa of Lake Superior.		Treaty of Sept. 30, 1854, vol. 10, p. 1109; act of May 26, 1872, vol. 17, p. 190. 37,121 acres allotted to 593 Indians; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 60.) The residue, 76,837 acres, restored to settlement. Agreement of Nov. 21, 1889. (See act of Jan. 14, 1889, vol. 25, p. 642.) Act June 30, 1913 (Public No. 4), and Executive order, Mar. 4, 1915.
Grand Portage (Pigeon River). (Under Grand Portage agency.) Tribe: Grand Portage Band of Chippewa of Lake Superior.		Treaty of Sept. 30, 1854, vol. 10, p. 1109; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 59.) 24,191.31 acres allotted to 304 Indians; 208.24 acres reserved for agency and wood purposes; residue, 16,041.97 acres, opened to public settlement. Executive order, Mar. 21, 1917, setting aside two small unsurveyed islands for reservation purposes.

<sup>1</sup> In Kansas and Nebraska.

<sup>2</sup> Agency abolished June 30, 1899.



TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>MINNESOTA—continued.</b>		
<b>Leech Lake</b> ..... (Under Leech Lake Agency.) Tribes: Cass Lake, Pillager, and Lake Winibigoshish Bands of Chippewa.	<i>Acres.</i>	Treaty of Feb. 22, 1855, vol. 10, p. 1165; Executive orders, Nov. 4, 1873, and May 26, 1874; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 49.) 48,446 acres allotted to 630 Indians and 321.60 acres reserved for agency and school purposes. (Act of June 27, 1902, vol. 32, p. 402.) Minnesota National Forest act, May 23, 1908 (35 Stat., 268). Executive order Feb. 16, 1911.
<b>Mdewakanton</b> ..... (Under Birch Cooley School.) Tribe: Mdewakanton Sioux.		By purchase. (See acts of July 4, 1884, Mar. 3, 1885, May 15, 1886, June 29, 1888 (25 Stat., 228); Mar. 2, 1889 (25 Stat., 992), and Aug. 19, 1890 (26 Stat., 349). 339.70 acres deeded to 47 Indians; 12,242.76 acres allotted to 88 Indians and held in trust by the United States; 8.90 acres reserved for school. (See Ann. Rpt., 1891, pp. 111 and 179, and schedule approved Nov. 21, 1904.) Act Mar. 4, 1917 (39 Stat. L., 1195).
<b>Millie Lac</b> ..... (Under White Earth School.) Tribe: Millie Lac and Snake River Bands of Chippewa.		Treaties of Feb. 22, 1855, vol. 10, p. 1165, and article 12, of May 7, 1864, vol. 13, pp. 693, 695; act of Jan. 14, 1889, vol. 25, p. 642. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., p. 45.) Joint resolution (No. 5), Dec. 19, 1893, vol. 28, p. 576, and joint resolution (No. 40) approved May 17, 1898, vol. 30, p. 745. (See Ann. Rept. 1890, pp. 38-43.) Purchase of land act of Aug. 1, 1914 (38 Stat., 591).
<b>Red Lake</b> ..... (Under Red Lake School.) Tribe: Red Lake and Pembina Chippewa.	543,528	Treaty of Oct. 2, 1863, vol. 13, p. 687; act of Jan. 14, 1889, vol. 25, p. 642. (See agreement July 8, 1889, H. Ex. Doc. No. 247, 51st Cong., 1st sess., pp. 27 and 32) and Executive order, Nov. 21, 1892. Act of Mar. 3, 1903, vol. 32, p. 1006, and act of Feb. 20, 1904, ratifying agreement made Mar. 10, 1902, vol. 33, p. 46, for sale of 256,152 acres. Act of Feb. 8, 1905, vol. 33, p. 708, granting 320 acres as right of way for the Minneapolis, Red Lake & Manitoba Ry. Co. Executive order, Feb. 16, 1911.
<b>Vermillion Lake</b> ..... (Under Vermillion Lake School.) Tribe: Bois Fort Chippewa.	1,060	Executive order, Dec. 20, 1881, act of Jan. 14, 1889, vol. 25, p. 642.
<b>White Earth</b> ..... (Under White Earth School.) Tribes: Chippewa of the Mississippi, Pembina, and Pillager Chippewa.	9,200	Treaty of Mar. 19, 1867, vol. 16, p. 719; Executive orders, Mar. 18, 1879, and July 13, 1883, act of Jan. 14, 1889, vol. 25, p. 642. (See agreement July 29, 1889, H. Ex. Doc. No. 247, 51st Cong., 1st sess., pp. 34 and 36.) Under act of Jan. 14, 1889 (25 Stat., 642), 428,401.05 acres have been allotted to 5,152 Indians, and 1,899.61 acres reserved for agency, school, and religious purposes, and under act of Apr. 23, 1904 (33 Stat., 539), 246,956.13 acres have been allotted to 2,816 Mississippi and Otter Tail Pillager Chippewa, being additional allotments to a part of the allottees under act of Jan. 14, 1889, leaving unallotted and unreserved 9,200 acres. Act June 21, 1906 (34 Stat., 353.)
<b>White Oak Point and Chippewa</b> ..... (Under Leech Lake Agency.) Tribes: Lake Winibigoshish and Pillager Bands of Chippewa and White Oak Point Band of Mississippi Chippewa.		Treaties of Feb. 22, 1855, vol. 10, p. 1165, and of Mar. 19, 1867, vol. 16, p. 719; Executive orders, Oct. 29, 1873, and May 26, 1874; act of Jan. 14, 1889, vol. 25, p. 742. (See H. Ex. Doc. No. 247, 51st Cong., 1st sess., pp. 42, 49.) 64,732 acres allotted to 826 Indians; the residue opened to public settlement; 240 acres reserved for ball park. (See 289-1906.)
<b>Total</b> .....	553,898	
<b>MONTANA.</b>		
<b>Blackfoot</b> ..... (Under Blackfoot School.) Tribes: Blackfoot, Blood, and Piegan.	604,826	Treaty of Oct. 17, 1855, vol. 11, p. 657; unratified treaties of July 18, 1866, and of July 13 and 15 and Sept. 1, 1868; Executive orders, July 8, 1873, and Aug. 19, 1874; act of Apr. 15, 1874, vol. 18, p. 28; Executive orders, Apr. 13, 1875, and July 13, 1880, and agreement made Feb. 11, 1887, approved by Congress May 1, 1888, vol. 25, p. 129; agreement made Sept. 26, 1895, approved by act of June 10, 1896, vol. 29, p. 353; act of Feb. 27, 1905, confirming grant of 356.11 acres of land and 120 acres of unsurveyed land. (See vol. 33, p. 816.) Act of Mar. 1, 1907 (34 Stats., 1035). 2,656 Indian; allotted 886,979 acres. 44,240.07 acres timber reserved (See 4021-1913.)

¹ Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>MONTANA—continued.</b>		
<b>Crow</b> ..... (Under Crow School.) Tribes: Mountain and River Crow.	<i>Acres.</i> 1,832,109	Treaty of May 7, 1868, vol. 15, p. 649; agreement made June 12, 1880, and approved by Congress Apr. 11, 1882, vol. 22, p. 42, and agreement made Aug. 22, 1881, approved by Congress July 10, 1882, vol. 22, p. 157; Executive orders, Oct. 20, 1875, Mar. 8, 1876, Dec. 7, 1886; agreement made Dec. 8, 1890; ratified and confirmed in Indian appropriation act approved Mar. 3, 1891, vol. 26, pp. 1039-1040; agreement made Aug. 27, 1892. (See Ann. Rept., 1892, p. 748; also President's proclamation, Oct. 15, 1892, vol. 27, p. 1084. Act of Apr. 27, 1904, vol. 33, p. 353, to amend and ratify agreement of Aug. 14, 1899. Under act Feb. 8, 1887 (24 Stat., 388), and act Feb. 28, 1891 (26 Stat., 794), and Executive order, June 8, 1901 (modifying Executive order of Mar. 25, 1901), 482,584 acres have been allotted to 2,453 Indians, and 1,822.61 acres reserved for administration, church, and cemetery purposes, leaving unallotted and unreserved 1,832,109 acres; 14,711.96 acres on ceded part have been allotted to 81 Indians. (See L. E. 743, p. 56; 852, p. 160, and 956, p. 416.) 37 Indians (Schedule A) have been allotted 7,429.55 acres under acts of Apr. 11, 1882 (22 Stat., 42), Feb. 8, 1887 (24 Stat., 388), and amendments thereto. President's proclamation, May 24, 1906 (34 Stat., 3200).
<b>Fort Belknap</b> ..... (Under Fort Belknap School.) Tribes: Grosventre and Assinibolin.	2497,600	Treaty of Oct. 17, 1855, vol. 11, p. 657; unratified treaties of July 18, 1866, and of July 13 and 15 and Sept. 1, 1868; Executive orders, July 5, 1873, and Aug. 19, 1874; act of Apr. 15, 1874, vol. 18, p. 28; Executive orders, Apr. 13, 1875, and July 13, 1880, and agreement made Jan. 21, 1887, approved by Congress May 1, 1888, vol. 25, p. 124; agreement made Oct. 9, 1895, approved by act of June 10, 1896, vol. 29, p. 350.
<b>Fort Peck</b> ..... (Under Fort Peck School.) Tribes: Assinibolin, Brulé, Santee, Teton, Hunkpapa, and Yanktonai Sioux.		Treaty of Oct. 17, 1855, vol. 11, p. 657; unratified treaties of July 18, 1866, and of July 13 and 15 and of Sept. 1, 1868; Executive orders, July 5, 1873, and Aug. 19, 1874, act of Apr. 15, 1874, vol. 18, p. 28; Executive orders, Apr. 13, 1875, and July 13, 1880; and agreement made Dec. 28, 1886, approved by Congress May 1, 1888, vol. 25, p. 113, act May 30, 1908 (35 Stat., 558), 2,032 Indians allotted 724,695.77 acres; 1,225,849 acres surplus land opened to settlement and entry by President's proclamation July 25, 1913. (See 42 L. D. 264.) 1,032.84 acres reserved for town site, religious, and administrative purposes. Act Aug. 1, 1914 (38 Stat. 593), allotments to children. 126,054 acres allotted to 438 children, approved Nov. 13, 1917. Act Feb. 26, 1917 (Pub. 355.) Sale to Great Northern R. R. and President's proclamation Mar. 21, 1917, rel. homestead entries on lands classified as coal.
<b>Flathead</b> ..... (Under Flathead School.) Tribes: Bitter Root, Carlos Band, Flathead, Kutenai, Lower Kallispel, and Pend d'Oreille.		Treaty of July 16, 1855, vol. 12, p. 975. Under acts of Apr. 23, 1904 (33 Stats., 302), Feb. 8, 1887 (24 Stats., 388), and Feb. 28, 1891 (26 Stats., 794), 2,431 Indians have been allotted 227,113 acres, and under act of Apr. 23, 1904, 2,524.70 acres have been reserved for tribal uses, and under act of Apr. 23, 1904, as amended by act of Mar. 3, 1906 (33 Stats., 1049-1080), 6,774.92 acres have been reserved for agency purposes, 18,521.35 acres reserved for Bison Range under acts of May 23, 1908 (35 Stat. L., 267), and Mar. 4, 1909 (35 Stats., 627). See 51019-1908. May 22, 1909, proclamation issued by President opening surplus lands. Act Mar. 3, 1909 (35 Stats., 795). 45,714 acres reserved for power and reservoir sites, act Apr. 12, 1910 (36 Stats., 865). Executive order Jan. 14, 1913. Act June 25, 1910 (36 Stat., 865).
<b>Northern Cheyenne</b> ..... (Under Tongue River School.) Tribe: Northern Cheyenne.	2489,500	Executive orders, Nov. 26, 1884, and Mar. 19, 1900, act of Mar. 3, 1903, vol. 32, p. 1000.
<b>Rocky Boy</b> .....	56,038	Part of Fort Assiniboin abandoned military reservation. Reserved by act Sept. 7, 1916 (39 Stat., 739), amending act of Feb. 11, 1915 (38 Stat., 807).
<b>Total</b> .....	3,480,073	

1 Outboundaries surveyed; partly surveyed.

2 Surveyed.

3 Partly surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>NEBRASKA.</b>		
<b>Niobrara.</b> (Under Yankton School, S. Dak.) Tribe: Santee Sioux.	Acres.	Act of Mar. 3, 1863, vol. 12, p. 819, 4th paragraph, art. 6; treaty of Apr. 29, 1868, vol. 15, p. 637; Executive orders, Feb. 27, July 20, 1866, Nov. 16, 1867, Aug. 31, 1869, Dec. 31, 1873, and Feb. 9, 1885. 33,515.92 acres selected as homesteads, 38,951.71 acres selected as allotments, and 1,067 acres selected for agency, school, and mission purposes; unratified agreement of Oct. 17, 1882. (For modification, see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624. For text, see misc. Indian doc., vol. 14, p. 305. Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Executive order Apr. 29, 1916.)
<b>Omaha.</b> (Under Omaha Agency.) Tribe: Omaha.	4,420	Treaty of Mar. 16, 1854, vol. 10, p. 1043; selection by Indians with President's approval, May 11, 1855; treaty of Mar. 6, 1865, vol. 14, p. 657; acts of June 10, 1872, vol. 17, p. 381, and of June 22, 1874, vol. 18, p. 170; deed to Winnebago Indians, dated July 31, 1874; act of Aug. 7, 1882, vol. 22, p. 341; act of Mar. 3, 1883 (37 Stats., p. 612); 130,602 acres allotted to 1,460 Indians; the residue, 4,420 acres, unallotted; act May 6, 1910 (36 Stat., 348), taxation; act May 11, 1912 (37 Stats., 111), sale of surplus land.
<b>Ponca.</b> (Under Yankton School, S. Dak.) Tribe: Ponca.		Treaty of Mar. 12, 1858, vol. 12, p. 997, and supplemental treaty, Mar. 10, 1865, vol. 14, p. 675; act of Mar. 2, 1889, sec. 13, vol. 25, p. 892. 27,236 acres allotted to 168 Indians; 160 acres reserved and occupied by agency and school buildings. (See letter book 205, p. 339; also, President's proclamation, Oct. 23, 1890, vol. 28, p. 1559.)
<b>Sioux (additional).</b> (Under Pine Ridge School.) Tribe: Oglala Sioux.	640	Executive order, Jan. 24, 1882.
<b>Winnebago.</b> (Under Winnebago Agency.) Tribe: Winnebago.	1,098	Act of Feb. 21, 1863, vol. 12, p. 658; treaty of Mar. 8, 1865, vol. 14, p. 671; act of June 22, 1874, vol. 18, p. 170; deed from Omaha Indians, dated July 31, 1874. (See vol. 6, Indian deeds, p. 215.) 122,374.20 acres allotted to 1,559 Indians; 480 acres reserved for agency, etc.; 610.10 acres sold; act July 4, 1888; the residue, 1,098 acres, unallotted; act May 6, 1910 (36 Stat., 348), taxation.
<b>Total.....</b>	<b>6,158</b>	
<b>NEVADA.</b>		
<b>Duck Valley.</b> (Under Western Shoshone School.) Tribe: Paiute and Western Shoshoni.	321,920	Executive orders, Apr. 16, 1877, May 4, 1886, and July 1, 1910.
<b>Moapa River.</b> (Under Moapa River School.) Tribe: Chemehuevi, Kaibab, Pawipit, Paiute, and Shivwits.	523	Executive orders, Mar. 12, 1873, and Feb. 12, 1874; act of Mar. 13, 1875, vol. 18, p. 448; selection approved by Secretary of the Interior, July 3, 1875; Executive orders of June 28, 1875, July 3, 1875, July 31, 1903, Oct. 28, 1912, and Nov. 26, 1912. 604.52 acres of irrigable land allotted to 117 Indians under general allotment act.
<b>Paiute.</b> (Under Fallon School.)	960	7½ sections (4,640 acres) reserved under second form withdrawal, reclamation act, June 17, 1902 (32 Stats., 388), for allotment to Indians; 3,730 acres have been allotted to 369 Paiute Indians and 10 acres reserved for school purposes (see 76082-1907); 960 acres unallotted and unreserved.
<b>Paiute and Shoshone scattered bands.</b>	280	Executive order, Sept. 16, 1912, setting aside 120 acres for allotment purposes; 160 acres added by Executive order Feb. 8, 1913.
<b>Pyramid Lake.</b> (Under Nevada School.) Tribe: Paiute.	322,000	Executive order, Mar. 23, 1874; act July 1, 1898 (30 Stats., 594). (See sec. 26, Indian appropriation act approved Apr. 21, 1904, vol. 33, p. 225.) Executive order Sept. 4, 1913, creating bird reserve out of Anaho Island.
<b>Summit Lake, Paiute and Shoshone.</b>	5,025	Executive order, Jan. 14, 1913, withdrawing from settlement for use of Paiute-Shoshone 5,025.98 acres.
<b>Walker River.</b> (Under Walker River School.) Tribe: Paiute.	75,204	Executive order, Mar. 19, 1874; joint resolution of June 19, 1902, vol. 32, p. 744; act of May 27, 1902 (32 Stats., pp. 245, 260); act of Mar. 3, 1908, vol. 32, pp. 982-997; act of June 21, 1906, vol. 34, p. 325; proclamation of President, Sept. 26, 1906, opening ceded part to settlement. It contained 258,005.84 acres. Allotted to 496 Indians, 9,878 acres; reserved for agency and school, 80 acres; reserved for cemetery, 40 acres; reserved for grazing, 37,848.29 acres; reserved for timber, 3,355.62 acres; reserved for church purposes, 160 acres. (L. B., 885, p. 187.) 34,000 acres added to reserve by Executive order Mar. 15, 1918.
<b>Winnemucca and Battle Mountain bands of Shoshone.</b>	840	Executive order, June 18, 1917, setting aside 840 acres of public domain for 2 bands of homeless Indians.
<b>Total.....</b>	<b>726,752</b>	

<sup>1</sup> Surveyed; partly in Idaho.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>NEW MEXICO.</b>		
Jicarilla Apache. (Under Jicarilla School.) Tribe: Jicarilla Apache.	<i>Acres.</i> 407,300	Executive orders, Mar. 25, 1874, July 18, 1878, Sept. 21, 1880, May 15, 1884, and Feb. 11, 1887; 129,813.35 acres allotted to 845 Indians and 280.44 acres reserved for mission, school, and agency purposes. (L. B. 335, p. 523.) Executive orders of Nov. 11, 1907, and Jan. 23, 1908. The above-mentioned 845 allotments have been canceled; reallocations have been made under the act of Mar. 1, 1907 (34 Stat. L., 1413). (See 64513-1909.) (Allotments to 797 Indians covering 354,204 acres approved Aug. 28, 1909.)
Mescalero Apache. (Under Mescalero School.) Tribe: Mescalero and Mimbreno Apache.	474,240	Executive orders, May 29, 1873, Feb. 2, 1874, Oct. 20, 1875, May 19, 1882, and Mar. 24, 1883. (See 25061, 49680, 75169, 75469-1908, and 14203, 26542-1909 and Senate bill 5602, 60th Cong., 1st sess.)
Navajo.	49,244	Executive order, Jan. 15, 1917, setting aside 49,244 acres for Navajo and other Indians.
Pueblo: (Under Santa Fe and Albuquerque Schools.) Tribe: Pueblo—		
Jemez.....	142,389	Confirmed by United States patents in 1904, under old Spanish grants; acts of Dec. 22, 1858, vol. 11, p. 374, and June 21, 1880, vol. 12, p. 71. (See General Land Office Report for 1876, p. 242, and for 1880, p. 658.) See Executive orders of June 13 and Sept. 4, 1902, setting apart additional lands for San Felipe and Nambé Pueblos, and Executive order of July 29, 1906, setting apart additional lands for Santa Clara Pueblo. (See 60806-1905.) Approximately 32,000 acres added. Area original Santa Clara Pueblo, 17,368.52. Executive orders, Dec. 10, 1906, Sept. 1, 1911, and Oct. 4, 1915, withdrawing 23,900 acres for James Indians. Area of original Spanish grant, 17,510 acres. Executive order, July 1, 1910, 28,800 acres. Area of Pueblo proper, 125,225. (See 55714-1910.) Total area Pueblos, including Zuni and Executive order res'n, 1,008,346. Resurveys 33149-14. Executive order Mar. 21, 1917, setting aside ..... acres for Indians of Laguna Pueblo.
Acoma.....	95,792	
San Juan.....	17,545	
Picuris.....	17,461	
San Felipe.....	34,787	
Cochiti.....	24,256	
Santo Domingo.....	92,398	
Taos.....	17,361	
Santa Clara.....	49,369	
Tesuque.....	17,471	
San Ildefonso.....	17,293	
Pojoaque.....	13,520	
Sia.....	17,515	
San Dia.....	24,187	
Isleta.....	110,080	
Nambé.....	13,586	
Laguna.....	101,511	
Laguna withdrawals.....	150,000	
Santa Ana.....	17,361	
Zuni. (Under Zuni School.) Tribe: Zuni Pueblo.	288,040	Executive orders, Mar. 16, 1877, May 1, 1883, and Mar. 3, 1885. Irrigable lands surveyed. (Area of original Spanish grant, 17,811.25 acres.) Approximately 73,000 acres added to Pueblo by Executive order of Nov. 30, 1917.
<b>Total.....</b>	<b>2,092,656</b>	
<b>NEW YORK.</b>		
Alleghany. (Under New York Agency.) Tribe: Onondaga and Seneca.	30,469	Treaties of Sept. 15, 1797, vol. 7, p. 601, and of May 20, 1842, vol. 7, p. 587.
Cattaraugus. (Under New York Agency.) Tribe: Cayuga, Onondaga, and Seneca.	21,680	Treaties of Sept. 15, 1797, vol. 7, p. 601; June 30, 1802, vol. 7, p. 79, and of May 20, 1842, vol. 7, p. 587. (See Ann. Rept., 1877, p. 164.)
Oil Spring. (Under New York Agency.) Tribe: Seneca.	640	By arrangement with the State of New York. (See Ann. Rept., 1877, p. 165.) Seneca agreement of Jan. 3, 1893, ratified by act of Feb. 20, 1893, vol. 27, p. 470; act of June 7, 1897, vol. 30, p. 89.
Oneida. (Under New York Agency.) Tribe: Oneida.	350	Treaty of Nov. 11, 1794, vol. 7, p. 44, and arrangement with the State of New York. (See Ann. Rept., 1877, p. 168.)
Onondaga. (Under New York Agency.) Tribe: Oneida, Onondaga, and St. Regis.	6,100	Do.
St. Regis. (Under New York Agency.) Tribe: St. Regis.	14,640	Treaty of May 13, 1796, vol. 7, p. 55. (See Ann. Rept., 1877, p. 168.) They hold about 24,260 acres in Canada.
Tusawanda. (Under New York Agency.) Tribe: Cayuga and Tusawanda Bands of Seneca.	7,549	Treaties of Sept. 15, 1797, vol. 7, p. 601, and Nov. 5, 1867, vol. 12, p. 991; purchased by the Indians and held in trust by the comptroller of New York; deed dated Feb. 14, 1862. (See also Ann. Rept., 1877, p. 165.)
Tuscarora. (Under New York Agency.) Tribe: Onondaga and Tuscarora.	6,249	Treaty of Jan. 15, 1828, vol. 7, p. 551, and arrangement (grant and purchase) between the Indians and the Holland Land Co. (See Ann. Rept., 1877, p. 167.)
<b>Total.....</b>	<b>87,677</b>	

\* Outboundaries surveyed.

\* Partly surveyed.

\* Surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
	<i>Acres.</i>	
<b>NORTH CAROLINA.</b>		
Qualla boundary and other lands. (Under Eastern Cherokee School.) Tribe: Eastern Band of Cherokee.	148,000 15,211	Held by deed to Indians under decision of U. S. Circuit Court for Western District of North Carolina, entered at November term, 1874, confirming the award of Rufus Barringer and others, dated Oct. 23, 1874, and acts of Aug. 14, 1876, vol. 19, p. 139, and Aug. 23, 1894, vol. 28, p. 441, and deeds to Indians from Johnston and others, dated Oct. 9, 1876, and Aug. 14, 1890. (See also H. E. X. Docs. No. 195, 47th Cong., 1st sess., and No. 128, 53d Cong., 2d sess.) Now held in fee by Indians, who are incorporated. Act of Mar. 3, 1903, vol. 32, p. 1000. (See Opinions of Asst. Atty. Gen., Mar. 14, 1894, and Feb. 3, 1904.) 35,000 acres of the 98,211 acres sold. Deeds dated Oct. 4, 1906; approved Dec. 12, 1906.
Total.....	63,211	
<b>NORTH DAKOTA.</b>		
Devils Lake (Under Fort Totten School.) Tribes: Assiniboin, Cuthead, Santee, Sisseton, Yankton, and Wahpeton Sioux.		Treaty of Feb. 19, 1867, vol. 15, p. 505, agreement Sept. 20, 1872; confirmed in Indian appropriation act approved June 22, 1874, vol. 18, p. 167. (See pp. 322-337, Comp. Indian Laws.) 127,381 acres allotted to 1,189 Indians; 77.83 acres reserved for church and 193.81 acres reserved for Government purposes. Act of Apr. 27, 1904, vol. 33, p. 319, to amend and ratify agreement made Nov. 2, 1901. President's proclamation of June 2, 1904, vol. 33, p. 2368. Trust period extended 10 years. Executive order, Feb. 11, 1918.
Fort Berthold..... (Under Fort Berthold School.) Tribes: Arikara, Gros-ventre, and Mandan.	100,000	Unratified agreement of Sept. 17, 1851, and July 27, 1856 (see Laws relating to Indian Affairs, Department of Interior, 1883), pp. 317 and 322; Executive orders, Apr. 12, 1870, July 13, 1880, and June 17, 1892; agreement Dec. 14, 1893, ratified by act of Mar. 3, 1891, vol. 26, p. 1032. (See Pres. proc. May 20, 1891, vol. 27, p. 979.) 220,634.91 acres allotted to 1,379 Indians (see letter book 445, p. 311). Under acts of Mar. 1, 1907 (34 Stat. L., 1042), and June 1, 1910 (36 Stat. L., 455), 532 allotments, aggregating 35,637 acres, were approved Aug. 15, 1910, 579 allotments, aggregating 112,544 acres, were approved Apr. 5, 1912, and 787 allotments, aggregating 206,154 acres, were approved Nov. 29, 1915. (See 61502-1910, proclamation June 29, 1911 (40 L. D., 151), 227,504 acres open; see H. J. Res. Apr. 3, 1912 (37 Stat. L., 631), and proclamation of Sept. 17, 1915, opening surface of lands classified as coal to homestead entry, authorized by act of Aug. 3, 1914 (38 Stat. L., 631).)
Standing Rock..... (Under Standing Rock School.) Tribes: Blackfeet, Hunkpapa, Upper and Lower Yanktonai Sioux.		Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders Jan. 11-Mar. 16, 1875, and Nov. 28, 1876. Agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders Aug. 9, 1879, and Mar. 20, 1884 (1,520,640 acres in South Dakota); unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624; for text see Misc. Indian Doc., vol. 14, p. 305.) Act of Congress of Apr. 30, 1883, vol. 25, p. 94, not accepted. Act of Congress, Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. Under acts Mar. 2, 1889, supra, Mar. 1, 1907 (34 Stat. L., 1041), May 29, 1908 (35 Stat. L., 451-460), and Feb. 14, 1913 (37 Stat. L., 675), 4,717 Indians have been allotted 1,383,612 acres. Under President's proclamation of Aug. 19, 1909 (36 Stat. L., 2500), 1,061,500 acres were opened to settlement. Remainder of lands opened to settlement by proclamation Mar. 15, 1915, as authorized by act Feb. 14, 1913 (37 Stat. L., 675, 680).
Turtle Mountain..... (Under Turtle Mountain Agency.) Tribe: Pembina Chippewa.		Executive orders Dec. 21, 1882, Mar. 29 and June 3, 1884. Agreement made Oct. 2, 1892, amended by Indian appropriation act approved and ratified Apr. 21, 1904, vol. 33, p. 194. 43,520 acres allotted to 326 Indians and 186 acres reserved for church and school purposes under the above-named act. Allotments to 2,691 members of this band on public domain aggregating 399,817.52 acres have been approved.
Total.....	100,000	

1 Surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>OKLAHOMA.</b>		
<b>Apache</b> ..... (Under Kiowa School.)	<i>Acres.</i>	Formerly Fort Sill. (See Executive order Feb. 26, 1897.) Act Mar. 3, 1901 (31 Stat., 1173); act June 23, 1902 (32 Stat., 467). Ex. Dec. No. 117, 49th Cong. 2d sess., act Aug. 24, 1912 (37 Stat., 534); act June 30, 1913 (38 Stat., 52). Lands to be purchased for those members of this band, some 80 in number, who elected to remain in Oklahoma.
<b>Cherokee</b> ..... (Under superintendent Five Civilized Tribes.)	30	Treaty with Western Cherokees at city of Washington, May 6, 1823 (7 Stat., 311) as amended by the treaty at Fort Gibson, of Feb. 14, 1833 (7 Stat., 414); referred to in treaty with Cherokees at New Echota, Ga., Dec. 29, 1835 (7 Stat., 478); July 19, 1866 (14 Stat., 799), as supplemented by treaty of Apr. 27, 1868 (16 Stat., 727). Agreement of July 1, 1902 (32 Stat., 716). Approximately, 41,824 Cherokees, including 4,919 freedmen, were allotted an average of 110 acres, 40 acres of which was a homestead to be nontaxable while held by the original allottee. Total acreage allotted 4,346,173; sold, 50,985; remaining unsold, 30.
<b>Cherokee Outlet</b> .....		Agreement of Dec. 19, 1891; ratified sec. 10 by act of Mar. 3, 1893 (27 Stat., 640), unoccupied part of Cherokee Outlet, not included in Territory of Oklahoma (26 Stat., 81). 63 Indians allotted 4,949.45 acres under act of Mar. 3, 1893.
<b>Cheyenne and Arapaho</b> ..... (Under Cheyenne and Arapaho, Cantonment, and Seger Schools.) Tribe: Southern Arapaho and Northern and Southern Cheyenne.		Executive order Aug. 10, 1890; unsatisfied agreement with Wichita, Caddo, and others, Oct. 19, 1872. (See Ann. Rept., 1872, p. 101.) Executive orders of Apr. 18, 1882, and Jan. 17, 1883, relative to Fort Supply Military Reserve (relinquished for disposal under act of Congress of July 5, 1894, by authority of Executive order of Nov. 5, 1894; see General Land Office Report, 1899, p. 158). Executive order of July 17, 1883, relative to Fort Reno Military Reserve. Agreement made October, 1890, and ratified and confirmed in Indian appropriation act approved Mar. 3, 1891, vol. 26, pp. 1022-1026. 528,789 acres allotted to 3,331 Indians; 231,828.55 acres for Oklahoma school lands; 32,343.93 acres reserved for military, agency, mission, etc., purposes; the residue, 3,500,562.06 acres, opened to settlement. (See Pres. proc. Apr. 12, 1892, vol. 27, p. 1018.) Executive order, July 12, 1895. President's proclamation of Aug. 12, 1903, vol. 33, p. 2317. Act of June 17, 1910 (36 Stat., 533), 57,637-10. Executive order Dec. 29, 1915, setting aside 40 acres for agency and school purposes.
<b>Chickasaw</b> ..... (Under superintendent Five Civilized Tribes, Muskogee, Okla.)	10	Treaty of June 22, 1855, vol. 11, p. 611; agreement of Apr. 22, 1897, ratified by act of June 22, 1898, vol. 30, p. 506; act of July 1, 1902, vol. 32, p. 641, ratifying agreement of Mar. 21, 1902; act of Apr. 21, 1904, vol. 33, p. 206; act of Apr. 23, 1904, vol. 33, p. 544. 10,966 Indians have been allotted 3,900,350 acres; sold, 870,095; remaining unsold, 10 acres.
<b>Choctaw</b> ..... (Under superintendent Five Civilized Tribes, Muskogee, Okla.)	14,460	Treaty of June 22, 1855, vol. 11, p. 611. Same as Chickasaw. Approximately 26,528 Indians have been allotted 4,291,036 acres; sold, 2,567,210 acres; unsold, 14,460 acres. There remains unsold also the coal and asphalt deposits within the segregated coal and asphalt area of the Choctaw and Chickasaw Nations.
<b>Creek</b> ..... (Under superintendent Five Civilized Tribes, Muskogee, Okla.)	352	Treaties of Feb. 14, 1833, vol. 7, p. 417, and June 14, 1866, vol. 14, p. 785, and the deficiency appropriation act of Aug. 6, 1882, vol. 22, p. 265. (See Ann. Rept. 1882, p. LIV.) Agreement of Jan. 19, 1839, ratified by the act of Mar. 1, 1839, vol. 25, p. 757; President's proclamation, Mar. 23, 1839, vol. 26, p. 1544; agreement of Sept. 27, 1897, ratified by act of June 23, 1898, vol. 30, p. 514; agreement of Mar. 8, 1900, ratified by act of Mar. 1, 1901, vol. 31, p. 861; President's proclamation of June 25, 1901, vol. 32, p. 1971; supplemental agreement of June 30, 1902, vol. 32, p. 500; President's proclamation of Aug. 8, 1902, vol. 32, p. 2021. (See act of May 27, 1902, vol. 32, p. 258; act of Apr. 21, 1904, vol. 33, p. 204.) Approximately 18,761 Indians have been allotted 2,997,114 acres; sold, 65,612 acres; remaining unsold, 352 acres.
<b>Iowa</b> ..... (Under Sac and Fox School.) Tribe: Iowa and Tomkawa.		Executive order, Aug. 15, 1883; agreement May 20, 1890, ratified by act of Feb. 13, 1891, vol. 26, p. 753. 8,605 acres allotted to 106 Indians; 20 acres held in common for church, school, etc.; the residue opened to settlement. Proclamation of President Sept. 18, 1891, vol. 27, p. 989. (See Ann. Rept. 1891, p. 677, and letter book 222, p. 364.)
<b>Kansa or Kaw</b> ..... (Under Ponca School.) Tribe: Kansa or Kaw.		Act of June 5, 1872, vol. 17, p. 228. 260 acres reserved for cemetery, school, and town site. Remainder, 99,644 acres, allotted to 247 Indians; act of July 1, 1902, vol. 32, p. 636, ratifying agreement, not dated. Act Mar. 3, 1909. (35 Stat., 778.)

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>OKLAHOMA—continued.</b>		
Kickapoo (Under Shawnee School.) Tribe: Mexican Kickapoo.	<i>Acres.</i>	Executive order, Aug. 15, 1883; agreement June 21, 1891; ratified by act of Mar. 3, 1893, vol. 27, p. 557. 22,650 acres allotted to 280 Indians; 478.72 acres reserved for mission, agency, and school purposes; residue opened to settlement by proclamation of the President May 18, 1895, vol. 29, p. 868; act of Mar. 3, 1903, vol. 32, p. 1001. June 21, 1906. (34 Stat., 362.)
Kiowa and Comanche. (Under Kiowa Agency.) Tribe: Apache, Comanche, Delaware, and Kiowa.		Treaty of Oct. 21, 1867, vol. 15, pp. 581 and 589; agreement made Oct. 6, 1892; ratified by act of June 6, 1900, vol. 31, p. 676, ceding 2,488,893 acres, of which 445,000 acres have been allotted to 3,444 Indians; 11,972 acres reserved for agency, school, religious, and other purposes. The residue, 2,033,583 acres, opened to settlement (letter books 486, p. 440; 488, p. 478). President's proclamation of July 4, 1901, vol. 32, p. 1978; June 23, 1902, vol. 32, p. 2007; Sept. 4, 1902, vol. 32, p. 2026; and Mar. 29, 1904, vol. 33, p. 2340. Of the 480,000 acres grazing land set apart under act of June 6, 1900, 1,841.92 acres were reserved for town sites under act Mar. 20, 1906 (34 Stat. L., 801), 82,059.58 acres were allotted to 513 Indians under act of June 5, 1906 (34 Stat. L., 213), and 480 acres allotted to 3 Indians under act of June 5, as amended by act Mar. 1, 1907 (34 Stat. L., 1018). The General Land Office reports the sale and entry of approximately 401,465.92 acres under act of June 5, and of 21,251.75 acres under act of June 28, 1906, to June 30, 1911. (See 87404-1909.) (See 75344-1908.) Under act May 29, 1908 (35 Stat., 471), and act June 25, 1910 (36 Stat., 861), 20,498 acres allotted to 169 Indians. Sale of unused, unreserved lands, act Mar. 3, 1911 (36 Stat., 1069). Act Mar. 4, 1915, Department of Agriculture experiment station. Sale of school and agency reserves, act June 30, 1913 (38 Stat., 92).
Fort Sill Apaches. (Under Kiowa School.)		Formerly prisoners of war, remnants and descendants of Chief Geronimo's Band. 6,149 acres of inherited Kiowa Comanche, and Apache lands were purchased by the United States for reallocation to 81 Indians and 8 whites of this band, who elected to remain in Oklahoma. (187 of the band removed to Mescalero. See Ann. Rept. 1913.) These lands were purchased under the acts of June 25, 1910 (36 Stat., 855), Aug. 24, 1912 (37 Stat., 534), appropriating \$200,000; June 30, 1913 (38 Stat., 94), appropriating \$100,000; and Aug. 1, 1914 (38 Stat., 687). See Executive order Feb. 26, 1897, act Mar. 3, 1901 (31 Stat., 1173); act June 28, 1902 (32 Stat., 467); Ex. . . . No. 117, 49th Cong., 2d sess.
Modoc. (Under Seneca School.) Tribe: Modoc.		Agreement with Eastern Shawnees made June 23, 1874 (see Ann. Rept. 1882, p. 271), and confirmed in Indian appropriation act approved Mar. 3, 1876, vol. 18, p. 447. Lands all allotted—3,966 acres allotted to 68 Indians, 8 acres reserved for church and cemetery purposes, 2 acres for school and 24 acres for timber. (Letter book 220, p. 102.) Act Mar. 3, 1909. (35 Stat., 752.) Ex. order Sept. 14, 1916, extending trust period 10 years with exception of 12 allottees.
Oakland. (Under Ponca School.) Tribe: Tonkawa and Lipan.		Act of May 27, 1878, vol. 20, p. 84. (See Ann. Rept. for 1882, p. LXX.) (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 476.) (See deed from Nez Perce, May 22, 1885, vol. 6, Indian Deeds, p. 504.) 11,456 acres allotted to 73 Indians; 180.50 acres reserved for Government and school purposes. The residue, 79,276.00 acres, opened to settlement. (Letter book 267, p. 240.) Agreement made Oct. 21, 1891, ratified by Indian appropriation act approved Mar. 3, 1893, vol. 27, p. 644. (For text, see Ann. Rept., 1893, p. 524.) Trust period extended 10 years on 27 allotments. Executive order, May 24, 1918.
Osage. (Under Osage School.) Tribe: Great and Little Osage.		Article 16, Cherokee treaty of July 19, 1866, vol. 14, p. 804; order of Secretary of the Interior, Mar. 27, 1871; act of June 5, 1872, vol. 17, p. 228. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 482.) (See act of June 28, 1906 (34 Stat., 639), act of Mar. 3, 1909 (35 Stat., 787), and Public Resolution No. 51, approved Feb. 28, 1906.) 2,230 Indians have been allotted 1,065,134.31 acres (3 selections). Since July 1, 1909, these 2,230 Indians have been allotted 1,465,350 acres from surplus lands, and 5,178.53 acres have been reserved for church, town-site, and railroad purposes. Act Mar. 3, 1909 (35 Stat., 778). Act Apr. 18, 1912 (37 Stat., 86), and Executive order June 1, 1914, rates of royalty on oil.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>OKLAHOMA—continued.</b>		
<b>Otoe</b> (Under Otoe School.) Tribes: Otoe and Missouri.	<i>Acres.</i>	Act of Mar. 3, 1881, vol. 21, p. 381; order of the Secretary of the Interior, June 25, 1881. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 479. Under acts of Feb. 8, 1887 (24 Stats., 388), Feb. 28, 1891 (26 Stats., 794), and Apr. 21, 1904 (33 Stats., 189), 128,251 acres were allotted to 514 Indians (885 allotments—see letter book 920, p. 326), 720 acres were reserved for agency, school, church, and cemetery purposes, and 640 acres set aside for tribal uses. Also act June 22, 1910 (36 Stat., 580-581).
<b>Ottawa</b> (Under Seneca School.) Tribe: Ottawa of Blanchards Fork and Roche de Boeuf.		Treaty of Feb. 23, 1867, vol. 15, p. 513: 12,995 acres were allotted to 160 Indians; 557.95 acres were authorized to be sold by act of Mar. 3, 1891 (vol. 26, p. 989). The residue, 1,587.25 acres sold. Letter book 220, p. 115, and act Mar. 3, 1909 (35 Stat., 752).
<b>Pawnee</b> (Under Pawnee School.) Tribe: Pawnee.		Act of Apr. 10, 1876, vol. 19, p. 29. Of this, 230,014 acres are Cherokee and 53,006 acres are Creek lands. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 470.) 112,701 acres allotted to 820 Indians; 840 acres were reserved for school, agency, and cemetery purposes; the residue, 160,320 acres, opened to settlement. (Letter books 261, p. 388, and 263, p. 5.) Agreement made Nov. 23, 1892, ratified by act of Mar. 3, 1893, vol. 27, p. 644. (For text see Ann. Rept., 1893, p. 526.) Trust period extended 10 years. Executive order, Mar. 2, 1918.
<b>Peoria</b> (Under Seneca School.) Tribes: Kaskaskia, Miami, Peoria, Piankashaw, and Wea.		Treaty of Feb. 23, 1867, vol. 15, p. 513. 43,324 acres allotted to 218 Indians. The residue, 6,313.27 acres, sold under act of May 27, 1902 (32 Stats., 245).
<b>Ponca</b> (Under Ponca School.) Tribe: Ponca.	1387	Acts of Aug. 15, 1876, vol. 19, p. 192; Mar. 3, 1877, vol. 19, p. 287; May 27, 1878, vol. 20, p. 76; and Mar. 3, 1881, vol. 21, p. 422. (See deed dated June 14, 1883, from Cherokee, vol. 6, Indian Deeds, p. 473.) There have been allotted to 783 Indians 100,734 acres, and reserved for agency, school, mission, and cemetery purposes 523.56 acres, leaving unallotted and unreserved 387 acres. (Letter books 302, p. 311, and 313, p. 401.) Indian appropriation act approved Apr. 21, 1904, vol. 33, p. 217. (See 38067-1915.)
<b>Potawatomi</b> (Under Shawnee School.) Tribes: Absentee Shawnees and citizen Potawatomi.		Treaty of Feb. 27, 1867, vol. 15, p. 531; act of May 23, 1872, vol. 17, p. 159. (222,716 acres are Creek ceded lands; 365,851 acres are Seminole lands.) Agreements with citizen Potawatomi June 25 and absentee Shawnees June 26, 1890 ratified and confirmed in the Indian appropriation act of Mar. 3, 1891, vol. 26, pp. 1016-1021. 215,899.42 acres allotted to 1,490 Potawatomi, and 70,791.47 acres allotted to 568 absentee Shawnees, and 510.63 acres reserved for Government purposes; the residue opened to settlement by the President's proclamation of Sept. 15, 1891, vol. 27, p. 989. (See letter book 222, pp. 442, 444, and Ann. Rept. for 1891, p. 677.) Executive order Nov. 24, 1916, and Jan. 15, 1917, extending trust period 10 years with exception of 15 absentee Shawnees, 85 citizen Potawatomi.
<b>Quapaw</b> (Under Seneca School.) Tribe: Quapaw.		Treaties of May 13, 1833, vol. 7, p. 424, and of Feb. 23, 1867, vol. 15, p. 513. 56,245.21 acres allotted to 248 Indians, 400 acres reserved for school and 40 acres for church purposes. (Letter book 335, p. 328.) Agreement of Mar. 23, 1893, ratified in Indian appropriation act approved Mar. 2, 1895, vol. 28, p. 907. Agreement of Jan. 2, 1899, ratified in Indian appropriation act approved Mar. 3, 1901, vol. 31, p. 1067. Act of Mar. 3, 1903, vol. 32, p. 697.
<b>Sauk and Fox</b> (Under Sac and Fox School.) Tribes: Ottawa, Sauk and Fox of the Mississippi.		Treaty of Feb. 18, 1867, vol. 15, p. 495; agreement June 12, 1890; ratified by act of Feb. 13, 1891, vol. 26, p. 749. 87,683.46 acres allotted to 548 Indians, and 800 acres reserved for school and agency purposes; the residue opened to settlement by the President's proclamation Sept. 18, 1891, vol. 27, p. 989. (See letter book 222, p. 160, and Ann. Rept. for 1891, p. 677.) Trust period extended for 10 years by Executive order of Mar. 27, 1896; again by Executive order of Aug. 28, 1906; again by Executive order of Aug. 1, 1916, with exception of 55 allottees.

<sup>1</sup> Surveyed.



TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>OKLAHOMA—continued.</b>		
<b>Seminole.</b> ..... (Under superintendent Five Civilized Tribes, Muskogee, Okla.)	<i>Acres.</i> 122	Treaties of Mar. 21, 1866, vol. 14, p. 755. (See Creek agreement of Feb. 14, 1881, Ann. Rept. 1882, p. 54, and deficiency act of Aug. 5, 1882, vol. 22, p. 265.) Agreement of Mar. 16, 1889. (See Indian appropriation act approved Mar. 2, 1889.) Agreement recorded in the treaty book, vol. 2, p. 35; agreement made Dec. 16, 1897, ratified by the act of July 1, 1898, vol. 30, p. 567; agreement of Oct. 7, 1899, ratified by act of June 2, 1900, vol. 31, p. 250. Approximately 3,127 Indians have been allotted 365,852 acres; sold, 4,263 acres; remaining unsold, 122 acres.
<b>Seneca.</b> ..... (Under Seneca School.) Tribes: Seneca, Eastern Shawnee, Wyandot, Peoria, etc.		Treaties of Feb. 28, 1831, vol. 7, p. 348; of Dec. 29, 1832, vol. 7, p. 411, and of Feb. 23, 1867, vol. 15, p. 513. 41,813 acres allotted to 485 Indians; 104.22 acres reserved for Government, church, and school purposes. Agreement of Dec. 2, 1901, ratified by act of May 27, 1902, vol. 32, p. 262; Executive order Feb. 15, 1916, extending trust period for 10 years, with exception of 44 allottees.
<b>Shawnee.</b> ..... (Under Seneca School.) Tribes: Seneca, absentee Shawnee, Mexican Kickapoo.		Treaties of July 20, 1831, vol. 7, p. 351; of Dec. 29, 1832, vol. 7, p. 411; of Feb. 23, 1867, vol. 15, p. 513, and agreement with Modocs, made June 23, 1874 (see Ann. Rept., 1882 p. 271), confirmed by Congress in Indian appropriation act approved Mar. 3, 1875, vol. 18, p. 447. 12,745 acres allotted to 117 Indians; 86 acres reserved for agency purposes (letter books 208, p. 256, and 233, p. 207); the residue, 2,543 acres, sold (agreement of Dec. 2, 1901, ratified by act of May 27, 1902, vol. 32, p. 262).
<b>Wichita.</b> ..... (Under Kiowa Agency.) Tribes: Ioni, Caddo, Comanche, Delaware, To-wah-toni Waco, and Wichita.		(See treaty of July 4, 1866, with Delawares, art. 4, vol. 14, p. 794.) Unratified agreement, Oct. 19, 1872. (See Ann. Rept., 1872, p. 101.) Agreement made June 4, 1891, ratified by act of Mar. 2, 1895, vol. 28, p. 895. 152,714 acres allotted to 957 Indians; 4,151 acres reserved for agency, school, religious, and other purposes. The residue, 536,468 acres, opened to settlement (letter book 490, p. 90.) President's proclamation of July 4, 1901, vol. 32, p. 1975. Unoccupied Chickasaw and Choctaw leased lands west of the North Fork of the Red River. Act of May 4, 1896, vol. 29, p. 113. President's proclamation, Mar. 16, 1896, vol. 29, p. 878. Act of June 6, 1900 (31 Stat., 680.)
<b>Wyandot.</b> ..... (Under Seneca School.) Tribe: Wyandot.		Treaty of Feb. 23, 1867, vol. 15, p. 513. 20,942 acres allotted to 244 Indians, 16 acres to churches, etc., leaving 534.72 acres unallotted (letter book 223, p. 332). Unallotted land sold, act Mar. 3, 1909 (35 Stat., 753). Act Apr. 28, 1904 (33 Stat., 519), allotments on public domain to absentee Wyandot.
<b>Total.</b> .....	15,361	
<b>OREGON.</b>		
<b>Grande Ronde.</b> ..... (Under Siletz Agency.) Tribes: Kalapuya, Clackamas, Cow Creek, Lakmlut, Marys River, Molala, Nestucca, Rogue River, Santiam, Shasta, Tumwater, Umpqua, Wapato, and Yamhill.		Treaties of Jan. 22, 1855, vol. 10, p. 1143, and of Dec. 21, 1855, vol. 12, p. 682; Executive order June 30, 1857. 440 acres reserved for Government use and 32,963 acres allotted to 269 Indians. (See letter book 210, p. 328.) Act of Apr. 28, 1904, vol. 33, p. 567, amending and ratifying agreement of June 27, 1901 (33 L. D., 586). Executive order Apr. 29, 1916, extending trust period 10 years with exception of 66 allottees.
<b>Klamath.</b> ..... (Under Klamath School.) Tribes: Klamath, Modoc, Palute, Pit River, Walpape, and Yahooskin Band of Snake (Shoshoni).	1 812,707	Treaty of Oct. 14, 1864, vol. 16, p. 707. Act June 10, 1896 (29 Stat., 321). Act of May 27, 1902 (32 Stat., 260). 208,278 acres allotted to 1,345 Indians; 6,094.77 acres reserved for agency, school, and church purposes. Indian appropriation act approved Apr. 21, 1904, vol. 33, p. 202; act of Mar. 3, 1905, vol. 33, p. 1033, and act of June 21, 1906 (34 Stat., 367). (See act of Mar. 3, 1909 (35 Stat., L. 752), removal of Modocs in Oklahoma to Klamath and allotments thereto.) Boundary dispute (see 9881-1911.)
<b>Siletz.</b> ..... (Under Siletz Agency.) Tribes: Alsea, Coquille, Kusan, Kwatami, Rogue River, Skoton, Shasta, Salustkes, Shulaw, Tututui, Umpqua, and 12 others.		Unratified treaty, Aug. 11, 1855; Executive orders Nov. 9, 1855, and Dec. 21, 1855, and act of Mar. 3, 1875, vol. 18, p. 446. Agreement Oct. 31, 1892, ratified by act of Aug. 15, 1894, vol. 28, p. 323. 44,459 acres allotted to 551 Indians. Residue, 177,593.66 acres (except 5 sections), ceded to United States. (See letter book 281, p. 358.) President's proclamation, May 16, 1895, vol. 29, p. 866. Acts of May 31, 1900, vol. 31, p. 233, and Mar. 3, 1901, vol. 31, p. 1065. Act of May 13, 1910 (36 Stat., 367). Executive order July 19, 1915.

<sup>1</sup> Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>OREGON—continued.</b>		
Umatilla..... (Under Umatilla School.) Tribes: Cayuse, Umatilla, and Wallawalla.	<i>Acres.</i> 74,082	Treaty of June 9, 1855, vol. 12, p. 945, and act of Aug. 5, 1882, vol. 22, p. 297; Mar. 3, 1885, vol. 23, p. 340, and sec. 8 of act of Oct. 17, 1888, vol. 25, p. 559. (See orders Secretary of Interior, Dec. 4, 1888, Ann. Rept., 1891, p. 682.) 52,742 acres allotted to 1,118 Indians, 980 acres reserved for school and mission purposes. (See letter book 255, p. 132.) Act of July 1, 1902, vol. 32, p. 730; act Mar. 2, 1917 (39 Stat. 909-96), providing for allotments as long as any land is available.
Warm springs..... (Under Warm Springs School.) Tribes: Des Chutes, John Day, Palute, Teneino, Warm Springs, and Wasco.	1322,275	Treaty of June 26, 1855, vol. 12, p. 983. 140,529 acres allotted to 968 Indians under the general allotment act of February 8, 1887 (24 Stat., 338), as amended, and 1,196 acres reserved for church, school, and agency purposes. Boundary dispute: Acts Aug. 19, 1890 (26 Stat., 355); June 6, 1894 (28 Stat., 86), and Mar. 2, 1917 (39 Stat., 909-936).
Total.....	1,209,014	
<b>SOUTH DAKOTA.</b>		
Crow Creek and Old Winnebago..... (Under Crow Creek School.) Tribes: Lower Yanktonai, Lower Brule, Miniconjou, and Two Kettle Sioux.		Order of department, July 1, 1863 (see Ann. Rept., 1863, p. 318); treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive order, Feb. 27, 1885 (see President's proclamation of Apr. 17, 1885, annulling Executive order of Feb. 27, 1885; Ann. Rept., 1885, p. 51); act of Mar. 2, 1889, vol. 25, p. 888; President's proclamations, Feb. 10, 1890, vol. 26, p. 1554. There have been allotted to 1,461 Indians 272,720 acres, and reserved for agency, school, and religious purposes 1,076.90 acres.
Lake Traverse..... (Under Sisseton School.) Tribes: Sisseton and Wahpeton Sioux.		Treaty of Feb. 19, 1867, vol. 15, p. 505; agreement, Sept. 20, 1872; confirmed in Indian appropriation act approved June 22, 1874, vol. 18, p. 167. (See pp. 328-337, Comp. Indian Laws.) Agreement, Dec. 12, 1889, ratified by act of Mar. 3, 1891, vol. 26, pp. 1035-1038. 308,838 acres allotted to 2,006 Indians, 32,840.25 acres reserved for State school purposes, 1,347.01 acres for church and agency purposes; the residue, 574,678.40 acres, opened to settlement. (See President's proclamation, Apr. 11, 1892, vol. 27, p. 1017.) Trust period extended 10 years, Executive order of Apr. 16, 1914.
Cheyenne River..... (Under Cheyenne River School.) Tribes: Blackfeet, Miniconjou, Sans Arcs, and Two Kettle Sioux.	219,206	Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders, Jan. 11, Mar. 16, and May 20, 1875, and Nov. 28, 1876; agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624, for text see Misc. Indian Docs., vol. 14, p. 306.) Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. See (act of Feb. 20, 1896, vol. 29, p. 10.) President's proclamations of Feb. 7, 1903, vol. 32, p. 2035, and Mar. 30, 1904, vol. 33, p. 2340. 1,052,320.99 acres have been allotted to 3,880 Indians. (See L. B. 828, p. 321.) Act of May 29, 1908 (35 Stat. L. 460). Under President's proclamation of Aug. 19, 1909 (36 Stat., 2500), 1,158,010 acres were opened to settlement, leaving unallotted and unreserved 219,206 acres.
Lower Brule..... (Under Lower Brule School.) Tribes: Lower Brule and Lower Yanktonai Sioux.	24,000	Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders, Jan. 11, Mar. 16, and May 20, 1875, and Nov. 28, 1876; agreement ratified by act of Feb. 28, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624; for text see Misc. Indian Docs., vol. 14, p. 306.) Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. (See act of Feb. 20, 1896, vol. 29, p. 10.) Agreement made Mar. 1, 1898, ratified by act of Mar. 3, 1899, vol. 30, p. 1362, ceding 120,000 acres to the United States. 202,992 acres allotted to 868 Indians, and 964.06 acres reserved for agency, school, and religious purposes, leaving unallotted and unreserved 24,000 acres. (See letter book 498, p. 336.) (See act of Apr. 21, 1906, 34 Stats., 124 and 1048, and President's proclamations of Aug. 12, 1907, and Sept. 24, 1913.) (Superintendent's report June 11, 1918 [80,169-18]).
		Surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>OREGON—continued.</b>		
Pine Ridge..... (Under Pine Ridge Agency.) Tribe: Brule Sioux, Northern Cheyenne, and Ogalalla Sioux.	<i>Acres.</i> 161,666	Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders, Jan. 11, Mar. 16, and May 20, 1875, and Nov. 23, 1876; agreement ratified by act of Feb. 23, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, 22 Stats., 624; for text see Misc. Indian Docs., vol. 14, p. 305.) Act of Apr. 30, 1888 (25 Stats., 94), not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. (See act of Feb. 20, 1896, 29 Stats., 10.) A tract of 32,000 acres in Nebraska was set apart by Executive order of Jan. 24, 1882, and was restored to the public domain by Executive order of Jan. 25, 1904; and by Executive order of Feb. 20, 1904, 640 acres of this land was set apart for Indian school purposes and is called the Sioux additional tract. (See Nebraska.) Act of Mar. 2, 1889 (25 Stats., 888), authority of President of July 29, 1904, 2,229,803.81 acres have been allotted to 8,269 Indians and 11,333.68 acres reserved for agency, school, and church purposes, aggregating 806,323.19, leaving unallotted and unreserved 161,666 acres. Allotment under acts of Mar. 2, 1889 (25 Stat. L., 888), Mar. 1, 1907 (34 Stat. L., 1048), and May 29, 1908 (35 Stat. L., 451). Act May 27, 1910 (36 Stat., 440), 40,960 acres State school land; 22,434 acres timber reserved. President's proclamation, June 29, 1911 (40 L. D., 164), opening 169,692 acres May 1, 1912.
Rosebud..... (Under Rosebud School.) Tribe: Loafer, Minicoujou, Northern Ogalalla, Two Kettle, Upper Brule, and Washazhe Sioux.		Treaty of Apr. 29, 1868, vol. 15, p. 635, and Executive orders, Jan. 11, Mar. 16, and May 20, 1875, and Nov. 23, 1876; agreement ratified by act of Feb. 23, 1877, vol. 19, p. 254, and Executive orders, Aug. 9, 1879, and Mar. 20, 1884. Unratified agreement of Oct. 17, 1882. (For modification see sundry civil appropriation act approved Mar. 3, 1883, vol. 22, p. 624; for text see Misc. Indian Docs., vol. 14, p. 305.) Act of Apr. 30, 1888, vol. 25, p. 94, not accepted. Act of Mar. 2, 1889, vol. 25, p. 888. President's proclamation of Feb. 10, 1890, vol. 26, p. 1554. (See act of Feb. 20, 1896, vol. 29, p. 10.) 1,853,606 acres allotted to 8,495 Sioux Indians, 416,000 acres opened to settlement, 29,392.01 reserved for Government purposes, churches, cemeteries, etc. Agreement made Mar. 10, 1898, ratified by act of Mar. 3, 1899, vol. 30, p. 1364. Act of Apr. 23, 1904, vol. 33, p. 254, ratifying agreement made Sept. 14, 1901. President's proclamation of May 16, 1904, vol. 33, p. 2354. Act of Mar. 1, 1907 (34 Stat., 1048); act Mar. 2, 1907 (34 Stat., 1230); act May 29, 1908 (35 Stat., 451); act May 30, 1910 (36 Stat., 448); President's proclamation, Aug. 24, 1908 (35 Stat., 2203), opening 838,000 acres in Tripp County. President's proclamation, June 29, 1911 (40 L. D., 164), opening 300,000 acres in Mallette and Washabaugh Counties, 43,520 acres State school land. Executive order, July 6, 1912.
Yankton..... (Under Yankton School.) Tribe: Yankton Sioux.		Treaty of Apr. 19, 1858, vol. 11, p. 744. 268,263 acres allotted to 2,613 Indians and 1,252.89 acres reserved for agency, church, and school purposes. (See letter book 207, p. 1.) Agreement Dec. 31, 1892, ratified by act of Aug. 15, 1894, vol. 28, p. 314. The residue open to settlement. (See President's proclamation, May 16, 1895, vol. 29, p. 865.) Executive order Apr. 20, 1916, extending trust period 10 years, with exception of 182 allottees.
<b>Total.....</b>	<b>404,771</b>	
<b>UTAH.</b>		
Goshute and scattering bands.	34,500	Executive order, Mar. 23, 1914.
Palutes.....	7,000	Executive order, Aug. 2, 1915, reserving approximately 700 acres for use of Cedar City and Indian Peak Bands of Palutes.
Cedar City and Indian Peak Bands.		
Panguitch.....		136.52 acres in Garfield County, Utah, purchased Nov. 1, 1903.
Shivwits.....	126,880	About 1 township in Washington County, Utah, withdrawn by departmental order based on office recommendation of Sept. 28, 1891 (L. B., 223, p. 270). Rights of squatters in withdrawal purchased by United States. (See also act of Mar. 3, 1891, 26 Stat., L., 989-1005.) Executive order Apr. 21, 1916, withdrawing 26,880 acres as Shemit or Shivwits Reservation.
		Unsurveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>UTAH—continued.</b>		
Skull Valley.....	<i>Acres.</i> 18,640	Reserved by Executive orders of Jan. 17, 1912, Sept. 7, 1917, and Feb. 15, 1918.
Uintah Valley..... (Under Uintah and Ouray Agency.) Tribes: Goshute, Pavant, Uinta, Yampa, Grand River Uncompahgre, and White River Ute.	1249,340	Executive orders, Oct. 3, 1861; act of June 13, 1878 (20 Stats. 165); acts of May 5, 1884, vol. 13, p. 63, and May 24, 1883, vol. 25, p. 157; joint resolution of June 19, 1902, vol. 32, p. 744; act of Mar. 3, 1903, vol. 33, p. 997; Indian appropriation, act approved Apr. 21, 1904, vol. 33, p. 207; President's proclamations of July 14, 1905, setting aside 1,010,000 acres as a forest reserve, 2,100 acres as town sites. 1,004,285 acres opened to homestead entry, 2,140 acres in mining claims; under act May 27, 1902 (33 Stats., 263), 99,407 acres allotted to 1,284 Indians, and 60,160 acres under reclamation, the residue, 179,194.65 acres, unallotted and unreserved. (See letter book 75, p. 398.) Executive order, Aug. 19, 1912, restoring lands of Fort Duchesne Military Reservation to the supervision of Interior Department.
Uncompahgre..... (Under Uintah and Ouray Agency.) Tribe: Tabagache Ute.		Executive order, Jan. 5, 1882. (See act of June 15, 1880, ratifying the agreement of Mar. 6, 1880, vol. 21, p. 199.) 12,540 acres allotted to 83 Indians, remainder of reservation restored to public domain, act of June 7, 1897, vol. 30, p. 62. (Letter book 408, p. 115.) Joint resolution of June 19, 1902, vol. 32, p. 744.
<b>Total.....</b>	<b>336,360</b>	
<b>WASHINGTON.</b>		
Chehalis..... (Under Cushman School.) Tribes: Chinook (Tsinuk), Clatsop, and Chehalis.		Order of the Secretary of the Interior, July 8, 1864; Executive order, Oct. 1, 1886. 471 acres set aside for school purposes. The residue, 3,753.63 acres, restored to the public domain for Indian homestead entry. 36 Indians made homestead selections, covering all the land. (See letter book 152, p. 201, and 153, p. 45.)
Columbia..... (Under Colville School.) Tribe: Columbia (Moses Band).		Executive orders, Apr. 19, 1879, Mar. 6, 1880, and Feb. 23, 1883. (See Indian appropriation act of July 4, 1884, vol. 23, p. 79.) Agreement made July 7, 1883, ratified by act of July 4, 1884, vol. 23, p. 79. Executive order May 1, 1886; Executive order of Mar. 9, 1894; department orders of Apr. 11, 1894, and Apr. 20, 1894, and Executive order of Jan. 19, 1906. 20,218 acres allotted to 35 Indians (see Executive order of May 21, 1886, and act of Mar. 8, 1906, 34 Stats., 55).
Colville..... (Under Colville Agency.) Tribes: Coeur d'Alene, Colville, Kalispel, Okinagan, Lake Methow, Nespelem, Pend d'Oreille, Sanpoil, and Spokane.	1,009,580	Executive orders, Apr. 9 and July 2, 1872; agreement made July 7, 1883, ratified by act of July 4, 1884, vol. 23, p. 79. Act of July 1, 1892, vol. 27, p. 62. (See acts of Feb. 20, 1896, vol. 29, p. 9, and July 1, 1898, vol. 30, p. 593.) 51,653 acres in north half allotted to 900 Indians (see letter book 428, p. 100); remainder of north half, estimated at 1,449,268 acres, opened to settlement Oct. 10, 1900 (see proclamation of the President, dated Apr. 10, 1900, 31 Stats., p. 1963). 240 acres have been reserved for town sites. 2,760.82 acres temporarily withdrawn for town sites. 357,419 acres allotted to 2,469 Indians. The residue, 1,009,580 acres (estimated), unallotted. Act of Feb. 7, 1903, vol. 32, p. 808. Allotments made under act of Mar. 23, 1906 (34 Stat. L., 80), and act of June 25, 1910 (36 Stat., 863). President's proclamation, opening reservation dated May 8, 1916 (39 Stat., p. 58 of proclamations), act Aug. 31, 1916 (39 Stat., 672).
Hob River..... (Under Neah Bay School.) Tribe: Hob.	640	Executive order, Sept. 11, 1896.
Kalispel..... (Under Coeur d'Alene Agency, Idaho.)	4,629	Executive order, Mar. 23, 1914.
Klickitat..... (Nonreservation; Warm Springs, Oreg.)		6 townships in Gilliam County, Wash., set aside for allotment selection by about 200 Indians under sec. 4, act Feb. 8, 1887 (24 Stat., 388), as amended. (See 30068-1912.)
Lummi..... (Under Tulalip School.) Tribes: Dwamish, Etahmur, Lummi, Snohomish, Suquamish, and Swinomish.		Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; Executive order, Nov. 22, 1873. Allotted 12,560.94 acres to 109 Indians; school conducted on 2-acre tract purchased from John Martin.
Makah..... (Under Neah Bay School.) Tribes: Makah and Quileute.	19,312	Treaty of Neah Bay, Jan. 31, 1855, vol. 12, p. 939; Executive orders, Oct. 26, 1873, Jan. 2 and Oct. 21, 1873. 3,727 acres allotted to 373 Indians. (See letter book 960, 228 and 37679, 1907.)

<sup>1</sup> Partly surveyed.

<sup>2</sup> Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>WASHINGTON—continued.</b>		
Muckleshoot. (Under Cushman School.) Tribe: Muckleshoot.	<i>Acres.</i>	Executive orders, Jan. 20, 1857, and Apr. 9, 1874. 44 Indians have been allotted 3,533.72 acres.
Nisqualli. (Under Cushman School.) Tribes: Muckleshoot, Nisqualli, Puyallup, Skwawksnamish, Stallakoom, and 5 others.		Treaty of Medicine Creek, Dec. 26, 1854, vol. 10, p. 1132; Executive order, Jan. 20, 1857. Land all allotted. 4,718 acres to 30 Indians.
Ozette. (Under Neah Bay School.) Tribe: Ozette.	640	Executive order, Apr. 12, 1898.
Port Madison. (Under Tulalip School.) Tribes: Dwamish, Etakmur, Lummi, Snohomish, Sukwamish, and Swiawamish.	165	Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; order of the Secretary of the Interior, Oct. 21, 1864. 7,219 acres allotted to 51 Indians; the residue, 65 acres, unallotted.
Puyallup. (Under Cushman School.) Tribes: Muckleshoot, Nisqualli, Puyallup, Skwawksnamish, Stallakoom, and 5 others.		Treaty of Medicine Creek, Dec. 26, 1854, vol. 10, p. 1132; Executive orders, Jan. 20, 1857, and Sept. 6, 1873. 17,463 acres allotted to 167 Indians. Agreement made Nov. 21, 1876, ratified by act of Feb. 20, 1893, vol. 27, p. 464. (For text see annual report 1893, p. 518.) The residue, 599 acres laid out as an addition to the city of Tacoma, has been sold, with the exception of 89.79 acres reserved for school, and 19.43 acres for church and cemetery purposes, under acts of Mar. 3, 1893 (27 Stat., 633, June 7, 1897; 30 Stat., 62), and act of June 21, 1906 (34 Stat., 377).
Quillente. (Under Neah Bay School.) Tribe: Quillente.	837	Executive order, Feb. 19, 1898.
Quinalt. (Under Cushman School.) Tribes: Quaitso and Quinalt.	168,553	Treaties of Olympia, July 1, 1855, and Jan. 25, 1856, vol. 12, p. 971; Executive order, Nov. 4, 1873. Under acts of Feb. 8, 1887 (24 Stat., 888), and Feb. 28, 1891 (26 Stat., 794), 690 Indians have been allotted 54,980.30 acres and 456.56 have been reserved for agency, lighthouse, and other purposes, leaving unallotted and unreserved 168,553 acres. Act Mar. 4, 1911 (36 Stat., 1545).
Shoalwater. (Under Cushman School.) Tribes: Shoalwater and Chehalis.	1235	Executive order, Sept. 22, 1886, 55,535-7-1909.
Skokomish. (Under Cushman School.) Tribes: Clallam, Skokomish, and Twana.		Treaty of Point No Point, Jan. 26, 1855, vol. 12, p. 933; Executive order, Feb. 25, 1874. Allotted in treaty reserve 4,990 acres; residue, none. (See L. B., 895, p. 268.) Allotted in Executive order addition, known as the Fisher addition, 814 acres; residue, none. (L. B., 895, p. 265.) 62 allotments.
Snohomish or Tulalip. (Under Tulalip School.) Tribes: Dwamish, Etakmur, Lummi, Snohomish, Sukwamish, and Swiawamish.	1324	Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; Executive order, Dec. 23, 1873. 23,166 acres allotted to 164 Indians.
Spokane. (Under Spokane Agency.) Tribe: Spokane.	82,327	Executive order, Jan. 18, 1881. Agreement made Mar. 18, 1887, ratified by Indian appropriation act approved July 13, 1892, vol. 27, p. 139. (For text see Ann. Rept., 1892, p. 743.) Joint resolution of Congress of June 19, 1902, vol. 32, p. 744. Under act of May 29, 1906 (35 Stat. L., 456), approximately 628 Indians have been allotted 65,114 acres, and 1,247.30 acres set aside for church, school, agency, and town-site purposes. By proclamation of May 22, 1906, the President opened the surplus lands to settlement. 5,781 acres classified as agricultural land, 82,647.50 acres classified as timber reserved for tribal use.
Squaxon Island (Klahohemin) (Under Cushman School.) Tribes: Nisqualli, Puyallup, Skwawksnamish, Stallakoom, and 5 others.		Treaty of Medicine Creek, Dec. 26, 1854, vol. 10, p. 1132; land all allotted, 1,494.15 acres, to 23 Indians.

<sup>1</sup> Surveyed.<sup>1</sup> Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>WASHINGTON—continued.</b>		
<b>Swinomish (Perrys Island).....</b> (Under Tulalip School.) Tribes: Dwanish, Etak-mur, Lummi, Snohomish, Sukwamish, and Swiwamish.	<i>Acres.</i>	Treaty of Point Elliott, Jan. 22, 1855, vol. 12, p. 927; Executive order, Sept. 9, 1873. Allotted, 7,350 acres to 71 Indians; reserved for school, 89.80 acres.
<b>Yakima.....</b> (Under Yakima School.) Tribes: Kikhitat, Palcos, Topniah, Wasco, and Yakima.	1412, 404	Treaty of Walla Walla, June 9, 1855, vol. 12, p. 951. Agreement made Jan. 13, 1885, ratified by Indian appropriation act approved Mar. 3, 1893, vol. 27, p. 631. (For texts see Misc. Indian Docs., vol. 41, p. 237; see also Ann. Rept., 1893, pp. 520-521, and S. Ex. Docs. No. 21, 40th Cong., 1st sess., and No. 45, 50th Cong., 1st sess.) Executive order, Nov. 28, 1892. Agreement, Jan. 8, 1894, ratified by act of Aug. 15, 1894, vol. 28, p. 320. 296,407 acres allotted to 3,137 Indians, and 1,020.24 acres reserved for agency, church, and school purposes. (See letter books 354, p. 419; 416, p. 263, and 879, p. 243.) Act of Dec. 21, 1904 (33 Stats., 595), recognizing claim of Indians to 293,837 acres additional land, subject to the right of bona fide settlers or purchasers, acquired prior to Mar. 5, 1904. (See 29648, 1905.) Act Mar. 6, 1906 (34 Stat., 53), and act May 6, 1910 (36 Stat., 348), under which 158,102 acres were allotted to 1,369 children. (See 9262-14.)
<b>Total.....</b>	1,609, 646	
<b>WISCONSIN.</b>		
<b>Lac Court Oreille.....</b> (Under Hayward School.) Tribe: Lac Court Oreille Band of Chippewa of Lake Superior.	1540	Treaty of Sept. 30, 1854, vol. 10, p. 1109; lands withdrawn by General Land Office, Nov. 22, 1890, Apr. 4, 1895. (See report by Secretary of the Interior, Mar. 1, 1873.) Act of May 29, 1872, vol. 17, p. 190. 68,511 acres allotted to 872 Indians. Act of Feb. 3, 1903, vol. 32, p. 795. (See 95927-1915.)
<b>Lac du Flambeau.....</b> (Under Lac du Flambeau School.) Tribe: Lac du Flambeau Band of Chippewa of Lake Superior.	24, 424	Treaty of Sept. 30, 1854, vol. 10, p. 1109, lands selected by Indians. (See report of Supt. Thompson, Nov. 14, 1863, and report to Secretary of the Interior, June 23, 1866. Department order of June 26, 1866. Act of May 29, 1872, vol. 17, p. 190. 45,756 acres allotted to 600 Indians; act of Feb. 3, 1903 (32 Stats., 795), leaving unallotted 24,424 acres.
<b>La Pointe (Bad River).....</b> (Under La Pointe Agency.) Tribe: La Pointe Band of Chippewa of Lake Superior.	14, 090	Treaty of Sept. 30, 1854, vol. 10, p. 1109. 368.91 acres patented under art. 10; 195.71 acres fishing ground. 115,808 acres allotted to 1,608 Indians. (See letter to General Land Office, Sept. 17, 1859, and letter book 381, p. 49.) Acts of Feb. 11, 1901 (31 Stats., 766), Mar. 2, 1907 (34 Stats., 1217), and Aug. 1, 1914 (38 Stats., 562-605), leaving unallotted and unreserved school and swamp lands, 14,090 acres.
<b>Potawatomi.....</b> (Under Carter School.)		Act June 30, 1913 (38 Stats., 77-102), which authorized the purchase of land in Wisconsin and Michigan for \$150,000.
<b>Red Cliff.....</b> (Under Red Cliff Agency.) Tribe: La Pointe Band (Buffalo Chief) of Chippewa of Lake Superior.		Treaty of Sept. 30, 1854, vol. 10, p. 1109; Executive order, Feb. 21, 1856. (See Indian Office letters of Sept. 3, 1856, and May 25, 1863, and General Land Office letter of May 27, 1863. See Executive orders. See report of Supt. Thompson, May 7, 1863. Lands withdrawn by General Land Office May 8 and June 3, 1863.) 2,535.91 acres allotted to 35 Indians under treaty; of the residue 11,566.90 acres were allotted to 169 Indians under joint resolution of Feb. 20, 1895, vol. 28, p. 970, and 40.10 acres were reserved for school purposes.
<b>Manominee.....</b> (Under Keshena School.) Tribe: Manominee.	231, 680	Treaties of Oct. 18, 1848, vol. 9, p. 952; of May 12, 1854, vol. 10, p. 1064, Feb. 11, 1856, vol. 11, p. 679, and May 18, 1916 (39 Stats., 123-153).
<b>Oneida.....</b> (Under Oneida School.) Tribe: Oneida.	151	Treaty of Feb. 3, 1838, vol. 7, p. 566. 65,428.13 acres allotted to 1,502 Indians; remainder, 84.08 acres, reserved for school purposes. 6 double allotments canceled containing 151 acres (see 5013-1912). Trust period on 35 allotments extended 19 years; Executive order, May 24, 1918.
<b>Stockbridge.....</b> (Under Keshena School.) Tribes: Stockbridge and Munsee.		Treaties of Nov. 24, 1848, vol. 9, p. 136; Feb. 5, 1856, vol. 11, p. 663, and of Feb. 11, 1856, vol. 11, p. 679; act of Feb. 6, 1871, vol. 16, p. 404. (For area, see act of June 22, 1874, vol. 18, p. 174.) 167 Indians allotted 8,920 acres. Patents in fee, act June 21, 1906 (34 Stats., 382). Act of Mar. 3, 1893 (27 Stat., 744).
<b>Total.....</b>	270, 885	

<sup>1</sup> Partly surveyed.<sup>2</sup> Surveyed.<sup>3</sup> Outboundaries surveyed.

TABLE 6.—General data for each Indian reservation, under what agency or school, tribes occupying or belonging to it, area not allotted or specially reserved, and authority for its establishment, to June 30, 1918—Continued.

Name of reservation and tribe.	Area (unallotted).	Treaties, laws, or other authorities relating to reserves.
<b>WYOMING.</b>		
Wind River..... (Under Shoshone School.) Tribes: Northern Arapaho and Eastern Band of Shoshoni.	Acres. 584,940	Treaty of July 3, 1868, vol. 15, p. 672; acts of June 22, 1874, vol. 18, p. 166, and Dec. 15, 1874, vol. 18, p. 291; Executive order May 21, 1887. Agreement made Apr. 21, 1896, amended and accepted by act of June 7, 1896 (vol. 30, p. 93); amendment accepted by Indians July 10, 1897. (See Land Div. letter book 359, p. 468.) Act of Mar. 3, 1905, ratifying and amending agreement with Indians of Apr. 21, 1904. (See vol. 33, p. 1016.) President's proclamation June 2, 1906, opening ceded part to settlement. It contained 1,472,844.15 acres. (See letter book 806, p. 157.) Reserved for Mail Camp, 120 acres; reserved for Mail Camp Park, 40 acres; reserved for bridge purposes, 40 acres. Subject to disposition under President's proclamation, 1,438,633.66 acres. 246,822 acres were allotted to 2,401 Indians, and 1,792.05 acres were reserved for agency, school, church, and cemetery purposes, under acts of Feb. 8, 1887 (24 Stats., 388), as amended by act of Feb. 23, 1891 (26 Stats., 794), and treaty of July 3, 1868 (15 Stats., 673), leaving unallotted and unreserved 584,940 acres. Act of Aug. 21, 1914 (38 Stat. 511), mining, oil, and gas lands.
Total.....	584,940	
Grand total.....	34,441.168	

<sup>1</sup> Partly surveyed.

TABLE 7.—Lands set apart during fiscal year ended June 30, 1918, for temporary use and occupancy by mission organizations.

States and reservations.	Organization.	Act and citation.	Warrant for action.	Acres.
<b>Arizona:</b>				
Pueblo Bonito.....	Christian Reformed Church.....		Policy...	90.00
San Xavier (Papago).	Franciscan Fathers of Arizona.....		do.....	.31
San Juan.....	Board of Home Missions of Presbyterian Church in the United States of America.		do.....	10.07
Truxton Canon.....	Immanuel Indian Missionary Council.....		do.....	2.00
Western Navajo.....	Presbytery of Northern Arizona.....		do.....	160.00
<b>California:</b>				
Campo.....	Catholic Church.....		do.....	1.00
Fort Bidwell.....	American Missionary Association.....		do.....	5.00
Fort Yuma.....	Woman's Home Missionary Society of the Methodist Episcopal Church.	Aug. 15, 1894 (28 Stat. 335).	do.....	1.00
<b>Minnesota: Leech Lake.</b>				
	Bowstring Indian Church.....		do.....	.50
<b>Montana:</b>				
Fort Peck.....	Bureau of Catholic Indian Missions.....	May 3, 1908 (35 Stat. 558-560).	do.....	40.00
Tongue River.....	General Conference of Mennonites of North America.		do.....	1.00
<b>North Dakota: Fort Berthold.</b>				
	American Missionary Association.....	June 1, 1910 (36 Stat. 455).	do.....	3.58
	Bureau of Catholic Indian Missions.....	do.....	do.....	7.24
<b>South Dakota:</b>				
Cheyenne River....	Catholic Indian Church.....	May 28, 1908 (35 Stat. 460).	do.....	95.02
Pine Ridge.....	Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the United States of America.		do.....	40.00
Rosebud.....	Rosebud Indian Cemetery.....		do.....	5.00
Standing Rock.....	Domestic Foreign Missionary Society of the Protestant Episcopal Church in the United States of America.	Feb. 14, 1913 (37 Stat. 677).	do.....	80.00
Total.....				531.72

TABLE 8.—*Patents in fee issued to mission organizations during fiscal year ended June 30, 1918.*

States and reservations.	Organization.	Act.	Citation.	Acres.
Montana: Blackfeet...	Board of Home Missions and Church Extension of the Methodist Episcopal Church.	Mar. 1, 1909; Mar. 1, 1907.	35 Stat. 781, 814; 34 Stat. 1015, 1026.	325.87
Nebraska: Santee.....	Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the United States of America.	Mar. 3, 1909.....	35 Stat. 814.....	20.00
North Dakota: Devils Lake.	Mission of Sisters of Charity for Montreal.	.....do.....	.....do.....	83.43
South Dakota: Crow Creek.....	Board of Home Missions of the Presbyterian Church in the United States of America.	.....do.....	.....do.....	180.00
Rosebud.....	Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the United States of America.	.....do.....	.....do.....	50.00
.....do.....	.....do.....	June 30, 1910.....	36 Stat. 448.....	480.59
.....do.....	.....do.....	.....do.....	.....do.....	284.20
Sisseton.....	.....do.....	Mar. 3, 1909.....	35 Stat. 814.....	40.00
Standing Rock.....	.....do.....	May 29, 1903; Feb. 14, 1913.	35 Stat. 480, 461; 37 Stat. 676, 676.	80.39
Wisconsin: Menominee.	Bureau of Catholic Indian Missions.	Mar. 3, 1909.....	35 Stat. 814.....	21.00
Total.....	.....do.....	.....do.....	.....do.....	1,545.48

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1918.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
Total, 1918.....	.....do.....	25,433	\$1,030,369
1917.....	.....do.....	26,657	1,315,113
1916.....	.....do.....	26,956	1,206,826
1915.....	.....do.....	27,927	1,177,900
1914.....	.....do.....	22,968	1,104,185
1913.....	.....do.....	24,490	1,316,298
1912.....	.....do.....	22,564	1,211,335
1911.....	.....do.....	21,235	847,456
1900.....	.....do.....	.....do.....	177,169
1890.....	.....do.....	.....do.....	131,874
Arizona.....	.....do.....	8,629	324,163
Camp Verde.....	Basket making.....	58	648
.....do.....	Woodcutting.....	4	228
Total.....	.....do.....	62	876
Colorado River.....	Basket making.....	20	509
.....do.....	Beadwork.....	75	1,500
.....do.....	Woodcutting.....	120	15,000
Total.....	.....do.....	215	17,009
Havasupai.....	Basket making.....	39	425
.....do.....	Woodcutting.....	12	144
Total.....	.....do.....	50	569
Kaibab.....	Basket making.....	20	150
Leupp.....	Blanket weaving.....	365	20,000
.....do.....	Others.....	100	4,500
Total.....	.....do.....	465	24,500
Moqui.....	Basket making.....	75	1,200
.....do.....	Blanket weaving.....	250	21,000
.....do.....	Pottery.....	25	500
.....do.....	Woodcutting.....	30	792
.....do.....	Others.....	2,125	73,443
Total.....	.....do.....	2,505	96,935



TABLE 9.—Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1918—Continued.

States and superintendencies.	Industry.	Number engaged.	Value of products.
<b>Arizona—Continued.</b>			
Navajo <sup>1</sup> .....	Blanket weaving.....	250	\$50,000
	Woodcutting.....	70	7,000
Total.....		320	57,000
Pima <sup>2</sup> .....	Basket making.....	1,050	10,500
	Pottery.....	200	350
	Woodcutting.....	450	7,600
Total.....		1,700	18,350
Salt River.....	Basket making.....	48	835
	Pottery.....	8	75
	Woodcutting.....	120	7,200
Total.....		176	8,100
San Carlos.....	Basket making.....	200	800
	Beadwork.....	50	150
	Woodcutting.....	200	14,000
Total.....		450	14,950
San Xavier.....	Basket making.....	750	15,000
	Woodcutting.....	400	45,000
	Others.....	50	1,500
Total.....		1,200	61,500
Truxton Canon.....	Basket making.....	30	* 900
	Woodcutting.....	30	* 3,000
	Others.....	103	* 3,400
Total.....		163	6,700
Western Navajo.....	Basket making.....	79	* 263
	Blanket weaving.....	1,050	* 15,750
	Woodcutting.....	42	* 945
	Others.....	132	* 1,575
Total.....		1,303	18,633
<b>California.....</b>			
		1,094	57,637
Bishop.....	Basket making.....	* 25	125
	Woodcutting.....	25	3,000
Total.....		50	3,125
Digger.....	Basket making.....	8	150
Fort Bidwell.....	do.....	100	1,250
	Beadwork.....	50	500
	Woodcutting.....	150	14,000
	Others.....	30	900
Total.....		330	16,650
Fort Yuma.....	Beadwork.....	15	1,000
	Pottery.....	6	1,000
	Woodcutting.....	100	5,000
Total.....		121	7,000
Greenville.....	Basket making.....	20	200
	Fishing.....	12	300
	Woodcutting.....	48	4,800
	Others.....	32	8,000
Total.....		112	13,300
Hoopa Valley.....	Basket making.....	75	1,000
	Fishing.....	100	500
	Woodcutting.....	40	2,000
	Others.....	10	5,000
Total.....		225	8,500

<sup>1</sup> 1917 report.<sup>2</sup> 1916 report.

\* Estimated.

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
<b>California—Continued.</b>			
<b>Maki.</b>	Basket making.....	18	\$172
	Woodcutting.....	17	1,248
	Others.....	10	150
<b>Total.....</b>		<b>45</b>	<b>1,570</b>
<b>Pala.</b>	Basket making.....	51	1,930
	Lace making.....	22	363
	Pottery.....	3	30
	Woodcutting.....	12	450
	Others.....	1	12
<b>Total.....</b>		<b>89</b>	<b>2,785</b>
<b>Soboba.</b>	Basket making.....	19	500
	Lace making.....	34	1,620
	Woodcutting.....	17	1,525
<b>Total.....</b>		<b>70</b>	<b>3,645</b>
<b>Tule River.</b>	Basket making.....	24	192
	Woodcutting.....	20	720
<b>Total.....</b>		<b>44</b>	<b>912</b>
<b>Idaho.</b>		<b>256</b>	<b>29,750</b>
<b>Coeur d'Alene.</b>	Beadwork.....	8	200
	Woodcutting.....	25	10,000
	Others.....	7	5,100
<b>Total.....</b>		<b>40</b>	<b>15,300</b>
<b>Fort Hall.</b>	Basket making.....	20	200
	Beadwork.....	45	600
	Others.....	150	13,500
<b>Total.....</b>		<b>215</b>	<b>14,300</b>
<b>Fort Lapwai.</b>	Woodcutting.....	1	150
<b>Iowa.</b>		<b>70</b>	<b>1,750</b>
<b>Sac and Fox.</b>	Beadwork.....	25	250
	Others.....	45	1,500
<b>Kansas: Potawatomi.</b>	Others.....	2	3,000
<b>Michigan.</b>		<b>490</b>	<b>15,300</b>
<b>Mackinac<sup>1</sup>.</b>	Basket making.....	35	300
	Beadwork.....	25	300
	Fishing.....	110	3,000
	Woodcutting.....	75	2,000
	Others.....	235	9,600
<b>Minnesota.</b>		<b>3,721</b>	<b>83,266</b>
<b>Grand Portage.</b>	Fishing.....	20	6,000
	Woodcutting.....	6	116
	Others.....	78	4,000
<b>Total.....</b>		<b>104</b>	<b>10,116</b>
<b>Leech Lake.</b>	Beadwork.....	100	1,800
	Lace making.....	25	400
	Fishing.....	400	7,500
	Woodcutting.....	50	3,000
	Others.....	1,800	21,500
<b>Total.....</b>		<b>2,375</b>	<b>34,200</b>
<b>Nett Lake.</b>	Others.....	112	3,850
<b>Pipestone (Birch Cooley).</b>	Others.....	5	2,000

<sup>1</sup>1917 report.

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
<b>Minnesota—Continued.</b>			
Red Lake.....	Beadwork.....	130	\$1,200
	Fishing.....	275	9,000
	Woodcutting.....	60	4,600
Total.....		465	14,800
White Earth.....	Basket making.....	50	100
	Beadwork.....	106	3,000
	Lace making.....	10	200
	Fishing.....	300	5,000
	Woodcutting.....	200	10,000
Total.....		666	18,300
Montana.....		425	35,045
Blackfoot.....	Woodcutting.....	25	6,000
Crow.....	Others.....	2	1,200
Flathead.....	Beadwork.....	50	3,000
	Fishing.....	4	600
	Woodcutting.....	15	5,000
	Others.....	4	2,250
Total.....		73	10,850
Fort Belknap.....	Woodcutting.....	30	2,100
	Others.....	20	1,500
Total.....		50	3,600
Fort Peck.....	Beadwork.....	35	375
	Woodcutting.....	45	1,700
	Others.....	65	10,000
Total.....		145	12,075
Tongue River.....	Beadwork.....	100	400
	Woodcutting.....	30	920
Total.....		130	1,320
Nebraska: Omaha.....	Others.....	12	9,080
Nevada.....		395	10,469
Fort McDermitt.....	Woodcutting.....	25	1,125
	Others.....	31	365
Total.....		56	1,490
Moapa River.....	Woodcutting.....	9	39
Nevada.....	Basket making.....	30	400
	Beadwork.....	30	250
	Fishing.....	50	2,500
	Others.....	4	2,500
Total.....		114	5,650
Walker River.....	Basket making.....	100	1,110
	Beadwork.....	50	105
	Fishing.....	50	1,600
	Woodcutting.....	6	400
Total.....		206	3,215
Western Shoshone.....	Basket making.....	10	75
New Mexico.....		4,630	246,290
Jicarilla.....	Basket making.....	50	750
	Beadwork.....	40	550
	Woodcutting.....	8	400
	Others.....	15	2,100
Total.....		114	3,500

<sup>1</sup> Estimated.

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
<b>New Mexico—Continued.</b>			
Mescalero.....	Basket making.....	48	\$1,000
	Beadwork.....	35	500
	Woodcutting.....	80	1,400
	Others.....	25	180
Total.....		155	3,080
Pueblo Bonito.....	Blanket weaving.....	1,000	80,000
	Woodcutting.....	50	12,000
	Others.....	65	4,380
Total.....		1,115	66,380
Pueblo day schools.....	Basket making.....	4	125
	Beadwork.....	60	600
	Blanket weaving.....	1	50
	Pottery.....	820	8,680
	Woodcutting.....	22	1,740
	Others.....	84	6,785
Total.....		991	17,980
San Juan.....	Basket making.....	25	250
	Blanket weaving.....	2,000	150,000
Total.....		2,025	150,250
Zuni.....	Beadwork.....	50	400
	Pottery.....	150	750
	Woodcutting.....	30	4,000
Total.....		230	5,150
<b>Oklahoma.....</b>		374	10,910
Cantonment.....	Beadwork.....	200	(*)
Kiowa.....	Woodcutting.....	30	3,500
	Others.....	4	2,100
Total.....		34	5,600
Seger.....	Beadwork.....	140	5,250
<b>Oregon.....</b>		526	15,175
Klamath.....	Basket making.....	200	1,000
	Woodcutting.....	10	2,150
Total.....		210	3,150
Siletz.....	Basket making.....	12	250
	Woodcutting.....	4	300
	Others.....	25	1,800
Total.....		41	2,350
Umatilla.....	Beadwork.....	75	1,875
	Woodcutting.....	25	2,100
Total.....		100	3,975
Warm Springs.....	Beadwork.....	50	500
	Woodcutting.....	80	4,200
	Others.....	75	1,000
Total.....		175	5,700
<b>South Dakota.....</b>		406	7,678
Crow Creek.....	Beadwork.....	60	250
Flandreau.....	Beadwork.....	5	150
Lower Brule.....	Beadwork.....	35	75
	Woodcutting.....	2	50
Total.....		37	125

Estimated.

Unknown

1917 report.

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
<b>South Dakota—Continued.</b>			
Pine Ridge.....	Beadwork.....	257	\$2,981
	Woodcutting.....	44	2,134
Total.....		301	5,065
Yankton.....	Others.....	3	2,088
Utah.....		139	3,715
Goshute.....	Basket making.....	32	1 75
	Beadwork.....	32	1 100
Total.....		64	175
Shivwits.....	Basket making.....	16	1 120
	Woodcutting.....	26	2,720
Total.....		42	2,840
Uintah and Ouray.....	Basket making.....	7	200
	Beadwork.....	26	500
Total.....		33	700
Washington.....		1,347	99,733
Colville.....	Basket making.....	55	780
	Beadwork.....	72	804
	Woodcutting.....	28	5,600
	Others.....	10	15,040
Total.....		165	22,324
Cashman.....	Basket making.....	57	890
	Fishing.....	13	300
	Others.....	5	160
Total.....		75	1,340
Neah Bay.....	Basket making.....	135	1 5,070
	Fishing.....	61	2,500
	Others.....	64	4,375
Total.....		260	11,945
Spokane.....	Woodcutting.....	25	2,400
	Others.....	3	1,200
Total.....		28	3,600
Taholah <sup>1</sup> .....	Basket making.....	74	2,500
	Fishing.....	90	13,503
	Woodcutting.....	13	353
	Others.....	22	575
Total.....		199	16,931
Tulalip.....	Basket making.....	20	140
	Fishing.....	54	16,368
	Woodcutting.....	31	17,106
	Others.....	45	1,980
Total.....		150	35,593
Yakima.....	Basket making.....	50	400
	Beadwork.....	300	1,600
	Fishing.....	100	1,000
	Woodcutting.....	20	4,800
Total.....		470	7,800

<sup>1</sup> 1917 report.<sup>2</sup> Estimated.<sup>3</sup> Partially reported.

TABLE 9.—*Indians engaged in industries other than farming and stock raising during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Industry.	Number engaged.	Value of products.
Wisconsin.....		2,857	\$73,715
Grand Rapids <sup>1</sup> .....	Basket making.....	25	660
	Beadwork.....	10	40
	Fishing.....	10	660
	Woodcutting.....	35	1,400
	Others.....	300	2,000
Total.....		380	4,740
Hayward.....	Beadwork.....	50	600
	Fishing.....	450	700
	Woodcutting.....	25	1,500
	Others.....	480	2,080
Total.....		1,005	4,880
Keeshena.....	Basket making.....	5	50
	Beadwork.....	10	200
	Fishing.....	200	1,600
	Woodcutting.....	1	400
	Others.....	210	7,400
Total.....		426	9,650
Lac du Flambeau.....	Basket making.....	150	1,500
	Beadwork.....	300	5,000
	Fishing.....	300	1,020
	Woodcutting.....	25	5,000
	Others.....	50	8,375
Total.....		825	20,895
La Pointe.....	Basket making.....	6	175
	Beadwork.....	12	400
	Fishing.....	5	7,000
	Woodcutting.....	8	4,800
	Others.....	10	( <sup>a</sup> )
Total.....		41	12,375
Onida.....	Basket making.....	80	( <sup>a</sup> )
	Lace making.....	75	3,000
	Others.....	3	( <sup>a</sup> )
Total.....		128	3,000
Red Cliff.....	Lace making.....	2	25
	Fishing.....	20	8,000
	Woodcutting.....	10	10,000
	Others.....	20	200
Total.....		52	18,225
Wyoming.....		70	3,798
Shoshone.....	Beadwork.....	10	( <sup>a</sup> )
	Woodcutting.....	10	700
	Others.....	50	3,098

RECAPITULATION.

Total.....	Basket making.....	3,971	\$54,240
	Beadwork.....	2,717	30,655
	Blanket weaving.....	4,916	308,800
	Fishing.....	2,624	88,641
	Lace making.....	168	5,608
	Pottery.....	1,212	11,385
	Woodcutting.....	3,091	271,154
	Others.....	6,734	255,886
Grand total.....		25,433	1,030,899

<sup>1</sup> 1917 report.

<sup>2</sup> Families.

<sup>a</sup> Unknown.

<sup>b</sup> Not reported.

TABLE 10.—Incomes of Indians (by reservations), including tribal incomes, fiscal year ended June 30, 1918.

States and superintendencies.	Popu- lation.	Total.	Crops raised by Indians.	Stock sold.	Native industries, weaving, basketry, etc.	Value of timber cut.	Wages earned.	Rations and miscel- laneous furnish.	From individual leases.	Proceeds sales of land.	Interest on trust fund.	Treaty agree- ment oblig- ations.	Indian money, proceeds of labor and miscel- laneous.
<b>Total</b>	<b>306,755</b>	<b>\$42,085,070</b>	<b>\$9,781,862</b>	<b>\$3,986,441</b>	<b>\$1,030,369</b>	<b>\$1,690,691</b>	<b>\$3,199,850</b>	<b>\$501,622</b>	<b>\$3,885,497</b>	<b>\$4,834,017</b>	<b>\$1,303,980</b>	<b>\$725,360</b>	<b>\$11,087,381</b>
1917.....	306,409	35,487,666	7,960,796	3,324,318	1,315,112	1,465,139	2,656,967	367,206	3,083,251	6,917,763	1,568,054	725,360	6,112,571
1916.....	307,917	35,489,948	6,780,719	2,583,069	1,205,626	1,137,631	2,676,377	491,036	3,003,906	3,421,586	1,779,115	680,560	4,664,785
1915.....	309,911	35,188,046	4,780,968	2,114,623	1,177,003	1,446,021	2,954,338	499,866	2,975,528	2,571,865	1,775,757	680,560	1,866,152
1914.....	307,447	34,007,355	4,007,355	1,999,663	1,194,388	1,625,065	2,127,403	576,212	3,498,934	4,312,812	1,777,643	680,560	1,940,711
1913.....	303,340	32,283,494	3,621,382	1,753,660	1,315,468	1,606,011	2,065,414	467,458	3,898,151	4,116,369	1,830,884	780,560	1,940,497
1912.....	300,930	31,462,083	3,250,288	1,571,785	1,315,468	1,606,011	2,065,414	467,458	3,898,151	4,116,369	1,830,884	780,560	1,940,497
1911.....	296,520	27,062,682	1,951,162	1,900,000	947,568	1,386,106	1,940,414	467,458	3,898,151	4,116,369	1,830,884	780,560	1,940,497
1910.....	297,522	27,062,682	1,951,162	1,900,000	947,568	1,386,106	1,940,414	467,458	3,898,151	4,116,369	1,830,884	780,560	1,940,497
1890.....	280,457	5,307,235	1,507,672	(c)	131,374	185,460	535,673	(c)	106,946	(c)	1,387,349	2,722,649	797,210
<b>Arizona.....</b>	<b>44,469</b>	<b>3,865,528</b>	<b>941,963</b>	<b>1,282,442</b>	<b>324,163</b>	<b>76,420</b>	<b>680,734</b>	<b>53,383</b>					<b>256,403</b>
Camp Verde.....	435	24,537	4,300	1,500	876		28,080	91					
Colorado River.....	1,194	174,924	47,600	1,500	17,000		38,816	1,358					18,130
Fort Apache.....	2,450	217,617	56,720	21,240		12,972	26,626	2,728	(c)				90,159
Havasupai.....	171	9,870	2,713	725	569		5,197	301					
Katlab.....	102	68,884	11,443	725	150		11,731	236					
Moqui.....	1,421	206,262	54,000	20,900	24,500		11,731	236					
Navajo.....	12,080	1,000,945	141,200	918,000	67,000	2,500	38,654	2,210					5,611
Phoenix.....	2,253	271,040	139,760	24,000	18,360		54,116	2,001					
Salt River.....	1,277	358,497	263,087	14,118	8,100	31,760	36,171	323					
San Carlos.....	2,623	291,362	52,760	18,517	14,570	6,760	63,264	21,990					118,139
San Xavier.....	5,237	684,181	145,655	215,235	161,500	6,900	256,398	11,523					
Tucson Canon.....	6,450	33,668	62,600		6,700		2,301	1,033					28,134
Western Navajo.....	6,565	70,826	11,065	11,208	15,533		28,466	1,538					
<b>California.....</b>	<b>10,725</b>	<b>1,092,894</b>	<b>483,552</b>	<b>65,945</b>	<b>57,637</b>	<b>2,498</b>	<b>454,335</b>	<b>7,554</b>	<b>8,790</b>	<b>40,418</b>			<b>2,165</b>
Bishop.....	1,588	41,310	26,310	4,823	3,125		6,470	282					
Campo.....	229	15,010	13,473				1,475	362	50				
Digger.....	290	7,132	4,300	138	150		7,284	804					
Fort Bidwell.....	750	68,962	26,240	1,750	16,650	90	64,000	1,108	2,000				109
Fort Yuma.....	835	257,334	172,648	8,132	7,000	1,060	126,000	188	200	6,152			
Greenville.....	693	142,668			13,300		40,292	188	200				
Hopps Valley.....	1,485	96,807	25,166	11,960	8,500	468	40,292	1,241	100				
Maidi.....	1,634	75,756	19,845	9,720	1,570		48,375	1,246					
Pala.....	1,025	134,265	70,452	10,107	2,738		41,580	515					
Round Valley.....	1,818	37,756	32,194	9,160			2,179	648	6,435	35,238			5,056
Sherman Institute.....		34,000					34,000						

Soboba.....	926	122,088	47,504	4,810	3,646	65,553	524						
Tule River.....	443	16,648	4,520	5,365	912	5,387	454						
Colorado.....	877	134,550	23,330	3,810		5,411	11,770	14,353	46,439	16,658	3,415		
Southern Ute.....	369	52,327	20,530	1,120		7,031	8,020	6,814	23,098	6,973	3,681		
Ute Mountain.....	508	52,323	(*)	2,680		1,380	3,750	7,644	24,450	9,535	2,824		
Florida: Seminole.....	585	9,200	5,900			3,300							
Idaho.....	4,144	1,290,476	521,029	130,463	29,750	38,898	8,077	461,181	11,591	4,967	8,000	11,865	
Coeur d'Alene.....	829	533,134	213,250	39,805	15,300	36,911		188,190	11,691	4,857	3,000	320	
Fort Hall.....	1,764	324,528	160,894	80,688	14,300	1,977	8,077	40,365			5,000	7,359	
Fort Lapwai.....	1,531	402,514	156,885		150			234,626	110			4,186	
Iowa: Sac and Fox.....	356	57,069	20,659	600	1,760	1,344		5,068	17,422			621	
Kansas.....	1,414	768,904	599,220	66,009	3,000			103,062	338	6,772		390	
Haskell Institute.....	8,455												
Potawatomi.....	637	501,765	384,550	66,800		5,457		45,159					
Michigan.....	1,087	25,006	214,670	57,600	3,000	6,000	400	57,923	328	6,772		390	
MacInac Mount Pleasant.....	1,087	17,066	(*)										
Minnesota.....	12,003	1,720,202	282,165	25,200	83,268	331,611	10,583	4,704	395,392	286,192	4,000	156,575	
Fond du Lac.....	1,087	101,445	36,202		5,722	4,000	1,171		30,592	22,813		443	
Grand Portage.....	321	24,327	1,085	10,116		1,419			11,472	8,558		19	
Neenah Lake.....	1,184	346,832	52,700	3,400	126,045	33,019	1,581	70	57,361	42,774		36	
Preston (Birch Point).....	164	14,328	2,934	2,000	5,860		708		27,944	17,110			
Red Lake.....	1,466	563,949	57,894	14,800	183,517	82,000	402	342	56,786	35,250		154,023	
Vermilion Lake.....	7,890	7,890		1,200		6,700			214,237	159,660	4,000	1,962	
White Earth.....	6,555	581,262	126,540	15,300	15,127	24,041	13,068	4,292					
Montana.....	12,079	3,599,990	892,345	711,835	35,045	187,113	82,549	261,281	709,441	23,119	76,134	334,042	
Blackfeet.....	2,773	676,118	69,500	372,000	6,000	574	36,467	45,628	335	6,000		30,945	
Crow.....	1,703	960,714	165,350	194,261	1,200	215		65,663	301,515			172,787	
Flathead.....	2,426	846,639	336,500		10,860	63,501	1,806	66,441	109,270			82,823	
Fort Belknap.....	2,039	128,608	32,002	32,500	9,000	3,812	5,179		6			11,847	
Fort Peck.....	2,039	644,476	126,060	12,075		49,240	10,117	83,550	298,656	16,278		9,980	
Rocky Boy's Agency.....	45,148	5,184		1,000		24,556	5,148					8,400	
Tongue River.....	1,470	288,268	67,700	82,964	1,320	24,062	23,832		70,124			17,780	

**• No record.  
• 1917 report.**

**\*Sundry reservations of Arizona and New Mexico.**

<sup>1</sup> Does not include \$197,120, which is duplicated in farming and grading tables.

**! Does not in-**

**! Does not in-**



TABLE 10.—*Incomes of Indians (by reservations), including tribal incomes, fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Popu- lation.	Total.	Crops raised by Indians.	Stock sold.	Native industries, weaving, basketry, etc.	Value of timber cut.	Wages earned.	Rations miscel- laneous issues.	From individual leases.	Proceeds sales of land.	Interest on trust fund.	Treaty and agree- ment obliga- tions.	Indian money, proceeds of labor and miscel- laneous.
Nebraska.....	2,463	\$756,455	\$316,500	\$8,508	\$8,080	.....	\$30,538	.....	\$379,698	.....	\$5,214	.....	\$4,987
Genoa.....	.....	5,590	.....	.....	.....	.....	5,590	.....	.....	.....	.....	.....	.....
Omaha.....	1,377	443,460	225,800	.....	9,080	.....	1,960	.....	206,000	.....	1,081	.....	5,639
Winneago.....	1,086	307,405	90,700	8,508	.....	.....	23,068	.....	179,628	.....	4,133	.....	1,348
Nevada.....	10,854	283,837	134,541	24,129	10,469	\$1,000	103,311	\$2,919	1,943	.....	.....	.....	5,515
Carson.....	.....	12,980	.....	.....	.....	.....	12,980	.....	.....	.....	.....	.....	.....
Fallon.....	420	48,140	17,120	1,081	.....	.....	29,030	82	.....	.....	.....	.....	827
Fort McDermitt.....	349	36,737	3,525	.....	1,490	.....	33,638	422	.....	.....	.....	.....	662
Moapa River.....	113	24,346	19,650	225	39	.....	4,052	159	.....	.....	.....	.....	221
Nevada.....	561	25,941	11,834	1,150	5,650	1,000	4,423	782	.....	.....	.....	.....	1,103
Walker River.....	804	59,830	37,665	5,068	3,215	.....	11,770	292	250	.....	.....	.....	1,572
Western Shoshone.....	607	70,713	44,747	16,607	.....	.....	7,429	725	.....	.....	.....	.....	1,130
Reno, special agent.....	2,800	2,150	(*)	.....	.....	.....	.....	457	1,663	.....	.....	.....	.....
New Mexico.....	21,186	1,877,333	696,650	398,158	246,290	75,633	195,789	22,046	10,384	.....	.....	\$100,000	132,433
Albuquerque.....	.....	9,414	.....	.....	.....	.....	9,414	.....	.....	.....	.....	.....	.....
Jicarilla.....	621	290,636	10,675	18,325	3,500	70,702	32,635	15,221	10,384	.....	.....	.....	96,894
Mescalero.....	630	94,433	20,497	18,370	3,050	.....	15,102	6,034	.....	.....	.....	.....	33,440
Pueblo Bonito.....	2,724	101,853	1,550	.....	66,360	.....	5,340	575	.....	.....	.....	28,000	33,28
Pueblo day schools.....	8,896	632,901	406,013	112,338	17,990	.....	86,047	216	7,000	.....	.....	7,000	7
San Juan.....	6,500	539,682	122,075	177,375	150,250	256	24,662	.....	.....	.....	.....	65,000	64
Santa Fe.....	.....	10,442	.....	.....	.....	.....	10,442	.....	.....	.....	.....	.....	.....
Zuni.....	1,815	226,272	132,900	71,750	5,150	4,675	11,767	.....	.....	.....	.....	.....	.....
New York: New York.....	5,982	31,712	(*)	.....	.....	.....	203	.....	.....	.....	2,069	10,500	18,940
North Carolina: Cherokee.....	2,343	132,465	46,300	16,375	.....	1,901	68,636	29	.....	.....	123	.....	1
North Dakota.....	8,940	1,481,116	444,314	171,780	.....	.....	68,265	23,006	196,773	\$446,832	32,724	70,040	19,343
Fort Berthold.....	1,204	621,524	17,200	142,650	.....	.....	10,768	.....	106,824	221,080	5,769	.....	17,233
Fort Totten.....	1,983	172,850	103,700	.....	.....	.....	39,173	261	39,173	978	.....	16,490	179
Standing Rock.....	3,455	561,515	132,414	33,380	.....	.....	26,990	20,000	31,969	224,774	26,965	83,500	1,523
Turtle Mountain.....	3,298	222,308	191,000	.....	.....	.....	2,869	2,795	30,807	.....	.....	.....	407
Walapton.....	.....	2,919	.....	.....	.....	.....	2,919	.....	.....	.....	.....	.....	.....

Oklahoma.....	116,494	16,019,468	1,265,645	263,358	10,910	203,560	1,406,145	2,030,513	516,967	59,120	9,032,260
Cantonment.....	780	111,423	48,450	1,650	(*)	9,180	46,172				
Cheyenne and Arap- aho.....	1,252	284,990	110,311			9,937	118,799	19,092	25,068		1,813
Chibchoo.....	4,583	1,097,297	293,000			13,199	367,085	72,137	126,191		6,466
Ojawa.....	2,536	10,385,108	216,000	235,750	5,660	26,128	190,980	9,981	247,148		9,470,609
Otoe.....	524	107,278	33,572	144		1,260	51,831		18,656		1,813
Pawnee.....	716	202,978	89,713			3,580	33,944		7,948		1,744
Ponca.....	1,060	309,187	164,800			6,830	123,000		24,325		243
Sas and Fox.....	653	128,669	60,752	7,684		2,920	42,640		1,793		
Sage.....	1,747	138,099	31,866	2,060	6,250	7,663					
Seneca.....	1,707	187,777	133,700	43,100		4,060	106,168		82	1,500	315
Shawnee.....	750	137,517	66,220	2,970		7,180	54,913		4,234		
Total.....	14,988	13,126,688	1,266,645	263,358	10,910	109,087	1,361,353	101,360	465,404	46,600	9,481,901
Five Civilized Tribes											
Cherokee Nation.....	126,325					* 81,460	44,792		2,761		
Chickasaw Na- tion.....	41,824	4,357				* 1,566					
Choctaw Nation.....	10,966	668,664				* 701		628,450	100		37,413
Creek Nation.....	26,525	2,013,405				* 6,965		1,983,137		10,520	112,843
Seminole Nation.....	13,761	33,523				* 3,727		17,666	22,625		5
Total Five Civil- ized Tribes.....	3,127	26,286				14			26,177		98
Total Five Civil- ized Tribes.....	101,506	2,900,980				94,463	44,792	2,529,268	61,563	10,520	180,359
Oregon.....	3,657	1,044,290	506,923	132,018	15,175	44,023	1,854	25,309	12,503		87,908
Klamath *.....	1,160	323,244	64,300	83,000	3,150	11,683	679	16,917	4,199		84,252
Salem.....	11,103					11,103					
Umatilla.....	446	54,611	21,975		2,350	2,904	248	23,600	1,059		235
Warm Springs.....	1,229	582,599	368,500	32,375	4,760	8,263	124,006	1,709	7,245		1,306
Total Five Civil- ized Tribes.....	822	67,663	32,148	16,643	6,700	10,180	927				2,115
Pennsylvania: Carlisle.....	39,229					39,229					
South Dakota.....	22,879	3,734,434	1,327,738	470,582	7,678	272,363	245,297	337,796	172,275	321,360	49,141
Canton Asylum.....	2,845	737,732	101,970	70,150		30,474	49,491	77,402	39,506	45,320	40,033
Crow Creek.....	17,807	36,126	36,126		260	17,810	3,755	31,325	4,242	16,480	119
Flandreau.....	263	70,865	8,740	850		8,048	40,745		9	12,860	208
Lower Brule.....	513	67,713	30,535	11,410	125	2,553	2,124	1,574	1,464	6,240	
Pierre.....	2,783					2,783					
Pine Ridge.....	7,340	1,020,817	264,699	314,782	5,065	103,661	77,940	108,236	257,549	107,120	911

\* Regular and irregular Government Indian employees.

\* Unknown.  
\* 1917 report.

\* Does not include Santee now under Yankton, S. Dak.  
\* Includes Indians in California.

TABLE 10.—*Incomes of Indians (by reservations), including tribal incomes, fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Popu- lation.	Total.	Crops raised by Indians.	Stock sold.	Native industries, weaving, basketry, etc.	Value of timber cut.	Wages earned.	Rations and miscel- laneous issues.	From individual leases.	Proceeds sales of land.	Interest on trust fund.	Treaty and agree- ment obliga- tions.	Indian monies, proceeds of labor and miscel- laneous.
<b>South Dakota—Contd.</b>													
Rapid City.....	5,521	\$4,307	\$235,203	\$59,240			\$4,307	\$92,728	\$115,583	\$43,338	\$75,676	\$92,400	\$3,031
Rosebud.....	2,280	752,069	235,250	14,150			74,858		71,560		15,380		2,135
Sisseton.....	1,000	1,000					1,000						
Springfield.....	3,117	608,217	441,725	(*)	\$2,068		7,760	3,511	90,330		10,759	49,440	2,604
Yankton.....	1,704	684,429	124,600	16,250	3,715	\$1,052	\$7,931	30,603	78,995	187,375	76,736	22,082	5,090
<b>Utah.....</b>													
Goshute.....	423	87,272	14,810		175		71,811						476
Shivwits.....	119	10,169	3,450		2,940		3,324	422					133
Uniah and Oursy.....	1,162	536,968	106,340	16,250	700	1,052	12,786	30,181	78,995	187,375	76,736	22,082	4,451
<b>Washington.....</b>													
Colville.....	11,082	1,764,782	820,716	135,910	99,733	151,330	146,687	2,332	308,900	28,206	3,249	1,000	66,800
Cushman.....	2,566	505,035	249,580	114,520	22,824	2,032	42,758	640	28,666	26,754			16,662
Neah Bay.....	2,143	86,200	16,230	6,306	1,340	8,660	54,528	226	1,375	279	3,249		44
Spokane.....	682	23,172	7,830	1,086	11,945	120	2,710	31					
Tanah.....	604	95,400	75,816	2,630	2,000	2,068	2,428	177	3,832	1,172		1,000	2,377
Tulalip.....	724	25,132	4,500		16,931		2,664	1,097					40
Yakima.....	1,353	235,076	109,310	11,965	142,685		28,695	56	4,278				2,454
	3,000	694,817	367,960		35,993	13,014	13,014	125	270,750				45,223
<b>Wisconsin.....</b>													
Grand Rapids.....	9,686	1,463,768	285,369	15,478	73,715	721,694	191,954	4,520	12		96,817		64,209
<b>Wyoming.....</b>													
Grand Rapids.....	1,372	55,465	50,725		4,740								
Hayward.....	1,276	85,771	24,525	1,620	4,830	21,936	30,430	1,997					383
Keshena.....	1,744	604,819	63,060	4,358	9,550	419,358	13,260	451					63,058
Lac du Flambeau.....	355	46,138	13,029		20,965		10,669	1,199	12				310
Leoni.....	1,064	440,871	74,990	9,900	12,375	280,400	63,188	309					309
Meda.....	2,610	45,443	37,070		3,000		6,373						
Red Cliff.....	527	103,543	21,790		18,225		62,945	431					149
Tonah.....		3,069					3,069						
<b>Wyoming: Shoshone.....</b>													
	1,606	546,044	142,182	31,100	3,793	139	60,719	5,680	25,845	6,459	302	36,466	233,279

\* Includes Santee formerly listed in Nebraska.

\* No data.

\* 1917 reports.

TABLE 11.—Use of agricultural lands belonging to Indians, fiscal year ended June 30, 1918.

States and reservations.	Area of lands.		Cultivated by Indians.		Able-bodied male adults.	Number of Indians farming.	Leased.							
							Allotted.			Unallotted.				
	Allotted.	Unallotted.	Allotted.	Unallotted.			Number of leases.	Number of allotments.	Area.	Income.	Number of leases.	Area.	Income.	Total income.
Total, 1918.	Acres.	Acres.	Acres.	Acres.	43,506	36,328	119,073	120,226	2,145,553	83,067,875	1,083	Acres.	835,087	143,102,932
1917.	5,322,348	846,011	612,532	147,401	42,777	36,178	120,567	119,241	2,023,758	2,615,539	1,063	434,961	44,370	2,069,909
1916.	5,313,420	981,666	539,577	137,114	42,969	35,823	122,612	120,046	2,357,543	2,605,498	1,544	452,527	56,212	2,068,710
1915.	6,483,640	964,428	544,538	132,444	42,239	31,966	116,500	115,207	2,416,794	2,117,166	51	2,370	6,266	2,122,431
1914.	6,528,170	969,441	532,086	132,444	42,333	29,811	(*)	16,757	1,570,267	(*)	68	4,151	(*)	2,164,319
1913.	5,820,701	2,221,135	468,722	125,546	39,961	29,216	(*)	28,847	3,106,259	(*)	578	170,201	(*)	3,520,261
1912.	6,775,542	2,873,108	478,052	117,279	39,901	28,051	(*)	27,058	2,762,799	(*)	46	4,951	(*)	3,073,866
1911.	6,661,032	2,042,963	431,600	127,003	39,901	24,459	(*)	19,753	2,526,496	(*)	1,708	138,598	(*)	3,075,271
1910.	6,311,591	2,535,328	265,080	117,945	28,544	10,835	(*)	2,592	(*)	(*)	52	6,421	(*)	7,063
1900.						6,554	(*)							
Arizona.	64,265	149,859	24,037	53,535	10,802	11,403	304	304	3,040	(*)				(*)
Camp Verde.		170		120	100	21	304	304	3,040	(*)				(*)
Colorado River.	12,365	87,806	1,314		318	310								
Fort Apache.		3,160		3,150	698	600								
Havasupai.		108		100	67	51								
Kaibab.		2,055		70	29	19								
Leupp.		780		500	267	260								
Mogul.		4,000		4,000	1,106	900								
Navajo.				16,420	2,129	2,080								
Prima.	40,360	9,690	26,250	9,690	2,129	6,053								
Salt River.	8,040	3,576	5,573	1,000	266	243								
San Carlos.		2,075		1,865	709	300								
San Xavier.		16,000	1,500	16,000	1,973	1,260								
Truxton Canon.	3,500			100	129	46								
Western Navajo.		20,300		1,000	1,631	400								

\* Only items reported.  
 † 1917 report.  
 ‡ Families actually living upon and cultivating lands in severalty.  
 § 1916 report.  
 ¶ Overestimated last year.  
 † Improvements.  
 ‡ Includes some grazing leases also.  
 § Not reported.  
 ¶ Included in "total income."

TABLE 11.—Use of agricultural lands belonging to Indians, fiscal year ended June 30, 1918—Continued.

States and reservations.	Area of lands.		Cultivated by Indians.		Able-bodied male adults.	Number of Indians farming.	Leased.						Total income.	
	Allotted.	Un- allotted.	Allotted.	Un- allotted.			Allotted.			Unallotted.				
							Number of leases.	Area.	Income.	Number of leases.	Area.	Income.		
California.....	<i>Acres.</i> 26,428	<i>Acres.</i> 31,046	<i>Acres.</i> 9,326	<i>Acres.</i> 5,810	3,123	1,736	674	691	<i>Acres.</i> 6,738	\$6,380	4	140	\$20	\$6,410
Bishop.....	3,350	8,000	1,350	.....	489	235	1	1	40	50	.....	.....	.....	50
Campo.....	438	.....	.....	226	34	.....	.....	.....	.....	.....	.....	.....	.....	.....
Digger.....	115	25	65	25	92	80	.....	.....	.....	.....	.....	.....	.....	.....
Fort Bidwell.....	6,150	.....	1,700	.....	172	80	.....	.....	.....	.....	.....	.....	.....	.....
Fort Yuma.....	8,020	160	2,255	160	283	190	500	5,000	115	15	3	100	15	130
Greenville.....	320	320	.....	.....	*175	146	.....	.....	.....	.....	.....	.....	.....	.....
Hoop Valley.....	1,400	1,360	1,400	1,360	366	250	1	20	100	.....	.....	.....	.....	100
Hualapai.....	13,386	.....	.....	1,521	199	123	.....	.....	.....	.....	.....	.....	.....	.....
Malik.....	1,685	3,490	1,067	1,481	337	254	.....	.....	.....	.....	1	40	5	5
Pais.....	6,368	.....	1,069	.....	506	32	172	189	1,078	6,225	.....	.....	.....	6,225
Round Valley.....	.....	3,693	.....	2,932	320	253	.....	.....	.....	.....	.....	.....	.....	.....
Soboba.....	.....	2,266	.....	.....	123	20	.....	.....	.....	.....	.....	.....	.....	.....
Tule River.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado.....	6,800	35	1,780	35	192	88	41	38	2,755	1,559	.....	.....	.....	1,559
Southern Ute.....	6,800	35	1,780	.....	87	87	41	38	2,755	1,559	.....	.....	.....	1,559
Ute Mountain.....	.....	.....	.....	35	112	1	.....	.....	.....	.....	.....	.....	.....	.....
Florida: Seminole.....	.....	2,140	.....	800	165	86	.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	216,519	11,079	26,008	50	791	524	2,032	2,097	189,645	424,820	9	118	.....	424,820
Coeur d'Alene.....	57,714	2,000	9,200	80	226	101	243	243	38,908	125,830	.....	.....	.....	125,830
Fort Hall.....	38,540	6,570	6,581	.....	406	223	548	548	10,831	14,831	9	115	(?)	14,831
Fort Lapwai.....	120,265	2,500	10,225	.....	159	200	1,243	1,308	110,108	294,089	.....	.....	.....	294,089
Iowa: Sac and Fox.....	.....	2,520	.....	1,500	122	55	.....	.....	.....	.....	2	520	1,200	1,200
Kansas.....	47,091	.....	14,940	.....	291	198	468	196	30,222	80,313	.....	.....	.....	80,313
Kikapoo.....	19,798	.....	5,915	.....	143	196	226	196	11,964	45,189	.....	.....	.....	45,189
Potawatomi.....	27,265	.....	9,026	.....	148	102	241	.....	15,268	35,154	.....	.....	.....	35,154
Michigan: Mackinac I.....	670	.....	670	.....	290	30	.....	.....	.....	.....	.....	.....	.....	.....

	225,450	66,168	15,838	1,665	2,153	932	26	26	1,031	2,898		2,898
Minnesota.....												
Fond du Lac.....	14,000		1,600		244	90						
Grand Portage.....	30	2	20	2	73	11						
Leech Lake.....	6,210		3,051		466	865						
Nett Lake.....			190		142	20						
Pipestone (Birch Cooley).....	600		387		35	6	12	12	228	342		342
Red Lake.....		67,766		1,563	310	190						
White Earth.....	204,600	400	10,646		868	800	14	14	1,368	2,516		2,516
Montana.....	674,682	193,510	69,800	11,006	2,681	1,684	1,285	1,538	242,266	182,663	119	26,253
Blackfeet.....	117,000	78,000	5,500		511	200	12	168	6,720	5,700	1	160
Crow.....	183,307		19,200		400	281	317	417	41,205	30,662		80
Flathead.....	121,376	66,990	36,000		648	370	594	601	46,971	63,941	118	26,068
Fort Belknap.....		9,000		4,500	260	270						
Fort Peck.....	283,000		10,100		489	165	372	372	145,270	82,350		
Rocky Boy's Agency.....		6,120		776	108	48						
Tongue River.....		33,400		6,730	376	280						
Nebraska.....	114,023	3,000	21,416		708	600	1,578	1,308	92,607	379,628	46	3,000
Omaha.....	60,000	3,000	12,300		330	260	730	550	47,700	200,000	40	3,000
Winnebago.....	54,023		9,116		378	240	848	848	44,807	176,628	6	30
Nevada.....	18,083	22,642	3,743	1,465	2,632	667	2	2	40	250		
Fallon.....	4,640	18	975	1	144	64						
Fort McDermitt.....	1,330	680	688	56	91	92						
Kosopa River.....	600		330		44	38						
Nevada.....		21,000		315	146	200						
Walker River.....	9,763	24	1,280	24	243	98	2	2	41	250		
Western Shoshone.....		1,070		1,070	169	76						
Reno, special agent.....	1,750		450		1,755	100						
New Mexico.....	3,025	58,030	1,025	25,970	3,363	4,267						
Jicarilla.....	2,725		725		124	100						
Mescalero.....		9,210		1,830	144	117						
Pueblo Bonito.....	300		300	100	(*)	200						
Pueblo day schools.....		26,900		22,080	2,575	2,060						
San Juan.....		13,830		6,000	(*)	1,200						
Zuni.....		8,000		6,000	640	600						
New York: New York Agency.....		88,847		20,640	(*)	1,600						
North Carolina: Cherokee.....		15,000		6,000	523	400						

\* Does not include Santee, now under Yankeon, S. Dak.  
 \* Unknown.

\* Not reported.  
 \* As reported.

\* Improvements not included.  
 \* 1917 report.

TABLE 11.—Use of agricultural lands belonging to Indians, fiscal year ended June 30, 1918—Continued.

States and reservations.	Area of lands.		Cultivated by Indians.		Able-bodied male adults.	Number of Indians farming.	Leased.				Unallotted.			Total income.		
	Allotted.	Unallotted.	Allotted.	Unallotted.			Allotted.		Num-ber of leases.	Num-ber of allotments.	Area.	Income.	Num-ber of leases.		Area.	Income.
North Dakota.....	Acres. 466,324	Acres. 15,000	Acres. 63,680	Acres.....	2,443	1,880	1,306	1,905	Acres 121,829	\$149,320	.....	Acres.....	.....	\$149,320		
Fort Berthold.....	105,994	15,000	14,870	.....	269	460	650	1,250	52,000	88,500	.....	.....	.....	88,500		
Fort Totten.....	78,900	.....	6,140	.....	256	150	411	411	30,998	38,748	.....	.....	.....	38,748		
Standing Rock 1.....	31,430	.....	13,670	.....	1,260	700	87	86	17,760	8,890	.....	.....	.....	8,890		
Turtle Mountain.....	250,000	.....	29,000	.....	643	550	158	158	21,071	13,192	.....	.....	.....	13,192		
Oklahoma.....	1,217,201	40	160,060	.....	3,293	2,694	5,467	6,917	1,100,908	1,135,748	889	30,040	\$17,732	1,153,480		
Cantonment.....	53,611	.....	4,000	.....	208	147	264	250	40,000	33,000	.....	.....	.....	33,000		
Cheyenne and Arapaho.....	64,656	.....	5,538	.....	208	137	*825	*825	120,741	*118,759	.....	.....	.....	118,759		
Five Civilized Tribes.....	59,291	.....	130,000	(*)	(*)	(*)	955	955	75,262	40,040	888	130,000	17,632	57,672		
Kiowa.....	500,000	.....	40,822	.....	982	200	2,922	2,600	455,748	490,184	.....	.....	.....	490,184		
Osage.....	187,182	40	11,800	.....	560	183	416	438	135,542	85,207	1	40	100	95,307		
Otse.....	39,276	.....	2,044	.....	96	87	296	252	32,653	35,103	.....	.....	.....	35,103		
Pawnee.....	50,647	.....	2,755	.....	146	100	*367	*367	*53,944	*53,944	.....	.....	.....	53,944		
Ponca.....	38,195	.....	7,830	.....	139	174	579	453	47,035	103,500	.....	.....	.....	103,500		
Sac and Fox.....	36,815	.....	6,333	.....	143	86	925	202	29,532	42,490	.....	.....	.....	42,490		
Seger.....	47,037	.....	4,515	.....	173	116	397	355	51,180	80,159	.....	.....	.....	80,159		
Sauca.....	52,805	.....	6,206	.....	301	134	(*)	(*)	(*)	(*)	.....	.....	.....	(*)		
Shawnee.....	67,686	.....	38,417	.....	198	385	*220	*220	26,360	*53,362	.....	.....	.....	53,362		
Oregon.....	181,742	46,550	23,009	.....	760	505	565	591	45,500	127,626	19	880	1,339	128,965		
Klamath 1.....	30,000	35,000	5,000	.....	274	125	18	18	1,873	960	.....	.....	.....	960		
Roseburg 1.....	21,707	.....	2,000	.....	(*)	76	42	42	1,940	2,240	.....	.....	.....	2,240		
Siletz.....	3,940	.....	720	.....	88	56	.....	.....	.....	.....	.....	.....	.....	.....		
Umatilla.....	64,318	1,560	11,721	.....	247	120	505	531	41,787	124,426	19	880	1,339	125,766		
Warm Springs.....	*61,777	10,000	3,568	.....	151	136	.....	.....	.....	.....	.....	.....	.....	125,766		

South Dakota.	1,548,019	1,200	89,118	1,200	4,760	3,838	2,669	1,881	172,888	177,183	177,183
Cheyenne River.....	19,000	.....	19,500	.....	971	750	10	10	2,000	1,100	1,100
Crow Creek.....	7,414	.....	7,000	.....	127	248	8	8	710	18,710	18,710
Flandreau.....	.....	1,200	.....	1,200	48	20	.....	.....	.....	.....	.....
Lower Brule.....	49,073	.....	6,746	.....	84	102	.....	.....	.....	.....	.....
Pine Ridge.....	11,205	.....	11,265	.....	1,494	1,403	30	30	1,343	3,006	3,006
Rosebud.....	1,305,286	.....	21,760	.....	1,220	1,790	404	348	42,350	22,296	22,296
Sisseton.....	117,001	.....	19,875	.....	1,475	235	1,700	900	93,881	66,928	66,928
Yankton.....	47,000	.....	12,982	.....	641	335	537	537	32,844	62,083	62,083
Utah.....	86,223	9,500	8,908	380	450	600	885	828	56,420	78,770	78,770
Goshute.....	.....	300	.....	300	129	423	.....	.....	.....	.....	.....
Shivwits.....	.....	1,200	.....	80	31	106	.....	.....	.....	.....	.....
Utah and Oursay.....	69,223	8,000	8,908	.....	280	161	865	826	56,420	78,770	78,770
Washington.....	302,873	36,708	52,130	725	1,935	1,198	1,512	1,600	93,915	288,115	288,115
Calville.....	109,550	26,459	27,320	.....	609	613	343	429	23,540	28,665	28,665
Cushman.....	8,537	.....	628	.....	136	68	8	8	205	1,375	1,375
Neah Bay.....	3,420	259	400	25	131	6	.....	.....	.....	.....	.....
Spokane.....	36,987	10,000	2,000	700	77	77	38	43	3,500	3,797	3,797
Taholah.....	400	.....	130	.....	20	20	.....	.....	.....	.....	.....
Tulalip.....	12,069	.....	2,681	.....	209	219	23	21	1,670	4,278	4,278
Yakima.....	136,000	.....	9,000	.....	500	211	1,100	1,100	66,000	250,000	250,000
Wisconsin.....	61,864	17,436	9,167	4,020	1,938	1,068	1	1	4	12	12
Hayward.....	51,800	.....	2,000	.....	359	100	.....	.....	.....	.....	.....
Kesewa.....	.....	3,220	.....	3,220	421	280	.....	.....	.....	.....	.....
Lac du Flambeau.....	457	30	457	30	134	55	1	1	4	12	12
Leda.....	.....	12,416	.....	750	108	50	.....	.....	.....	.....	.....
La Pointe.....	5,000	1,780	2,900	.....	(*)	148	.....	.....	.....	.....	.....
Onadaga.....	4,932	.....	3,458	.....	714	400	.....	.....	.....	.....	.....
Red Cliff.....	565	.....	375	.....	152	35	.....	.....	.....	.....	.....
Wyoming: Shoshone.....	77,996	75,700	7,299	.....	386	245	250	260	14,215	19,22,880	22,680

\* 1917 report.  
 \* Includes grazing leases.  
 \* Not reported.  
 \* Includes some grazing leases.  
 \* Leases are made without departmental supervision.  
 \* Includes grazing lands.  
 \* Classified as grazing land.  
 \* Unknown.  
 \* As reported.  
 \* Crop value not included.



TABLE 12.—Use of grazing lands belonging to Indians, fiscal year ended June 30, 1918.

States and reservations.	Area of lands.		Grazed by Indian stock.		Indians engaged in stock raising.	Leased.				Total income.			
	Allotted.	Unallotted.	Allotted.	Unallotted.		Allotted.		Unallotted.					
						Number of leases.	Number of allotments.	Area.	Income.		Number of leases.	Area.	Income.
Total, 1918, 1917, 1916, 1915, 1914, 1913, 1912, 1911, 1900.	Acres.	Acres.	Acres.	Acres.		119,900	120,889	1,055,692	\$1,024,742	504	9,432,845	\$784,471	\$1,809,213
	12,010,218	34,302,991	6,170,246	24,335,780	47,174	119,900	116,983	1,067,193	970,529	240	9,042,866	714,894	1,685,188
	12,701,463	35,274,363	7,312,632	24,014,819	44,874	117,663	114,794	1,055,470	1,174,114	1,329	9,406,866	574,701	1,748,815
	13,484,039	31,969,219	8,000,349	22,004,879	43,300	115,569	110,428	1,068,779	925,554	1,759	10,162,842	429,886	1,346,449
	13,088,784	30,935,867	8,702,245	21,894,398	44,704	119,387	118,356	1,064,446	(c)	3,911	10,668,948	(c)	1,771,421
	12,490,008	29,991,010	8,176,753	21,300,359	53,503	(c)	128,347	1,092,269	(c)	3,225	8,369,351	(c)	1,410,078
	12,500,000	30,500,000	8,541,177	20,511,984	54,226	(c)	127,005	1,072,799	(c)	3,534	8,589,325	(c)	1,636,948
	9,568,449	31,024,686	8,755,552	21,314,688	51,380	(c)	119,783	1,028,486	(c)	101	2,373,815	(c)	1,216,125
	6,285,485	25,169,192	4,966,446	18,728,124	44,965	(c)	2,592	(c)	(c)	66	2,587,435	252,790	252,790
	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	7	82,500	17,491	17,491
	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	34	997,920	85,449	85,449
	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	4	87,600	1,580	1,580
Arizona.	65,736	17,327,302	70,202	14,647,616	15,997								
		92,500		10,000	40								
		1,690,370		663,775	1,000								
		128,407		415	43								
		79,780		79,780	17								
		831,840		804,090	1,441								
		1,841,000		1,841,000	2,000								
		2,997,908		2,997,908	3,166								
		1,714,968		1,714,968	1,455								
		14,110		14,110	315								
		16,060		16,547	525								
		26,883		26,469	315								
California.	80,428	173,964	96,964	96,542	1,158	20	137	22,730	2,400	3	12,000	1,146	1,146
	5,530	62,000	6,720		7,461								
	50	16,589	100	16,589	51								
	32,000	15,206	14,150	206	47	9	126	21,000	2,000				
		2,000		2,000	20								
	4,479	1,427	64	177	(c)	10	10	1,600	200				
	1,600	3,000	1,600	2,000	126								
		24,749		24,749	40								

	57	9,983	136,563	9,983	132	1	1	130	200	12,000	1,146	200
Pala.....	36,062	17,927	37,748	80	102							
Round Valley.....	30,000	33,964		21,964	128							
Soboba.....					62							
Tule River.....												
Colorado.....	39,480	380,000	16,265	112,440	77	31	28	5,780	4,580	247,560	4,075	8,555
Southern Ute.....	39,480	380,000	16,265	112,440	77	31	28	5,780	4,580			4,580
Ute Mountain.....												4,075
Florida: Seminole.....	345,232	22,982			80							
Idaho.....					1,076	1,122	1,126	171,121	26,361			33,182
Coeur d'Alene.....	28,440	4,579	28,440	4,579	404	9	9	1,380	360			360
Fort Hall.....	305,040	96,540	163,784	69,509	372	1,102	1,102	168,849	25,434	40	2,144	27,578
Fort Lapwai.....	14,752	11,845	13,860	4,000	350	11	15		567	34	4,677	5,244
Iowa: Sac and Fox.....		870		370	76					( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )
Kansas.....	22,068		4,544		170	218		16,950	22,769			22,769
Kickapoo.....	3,076		2,472		121							
Potawatomi.....	19,022		2,072		49	218	( <sup>11</sup> )	16,950	22,769			22,769
Michigan: Machineco.....	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )		130							
Minnesota.....	161,937	312,453	136,911	240,250	901	98	98	6,666	1,846	17	1,380	2,079
Fond du Lac.....	9,000		1,000		100							
Grand Portage.....	19,980											
Leech Lake.....	19,867		12,821		190	3	3	154	70			70
Nett Lake.....	( <sup>12</sup> )	( <sup>12</sup> )	( <sup>12</sup> )		20							
Red Lake.....	123,090	303,003		236,800	175							
White Earth.....		3,450	123,090	13,450	416	11	95	6,482	1,776	13	1,380	2,009
Montana.....	1,528,449	2,514,999	305,711	789,206	2,463	2,292	2,901	670,932	78,628	112	2,835,185	411,346
Blackfeet.....	736,840	600,000	96,600	20,000	1,665	227	836	399,280	38,928	93	600,000	96,928
Crow.....	317,229	1,843,702	73,431	226,576	1,525	2,000	2,000	238,652	35,000	6	1,618,125	240,000
Flathead.....	42,000	162,600	67,000	20,000	340	40	40	5,000	2,500			2,500
Fort Belknap.....		532,717		234,217	265					142	375,000	37,872
Fort Peck.....	432,400		68,680		214	25	25	8,000	1,200	149	121,980	5,396
Rocky Boy's Agency.....		46,380		21,963	4					1	30,080	8,400
Tongue River.....		320,600		266,450	13,450					1	90,000	17,250
Nebraska: Winnebago.....	15,000		15,000		76							

<sup>1</sup> Includes some farming leases also.  
<sup>2</sup> Not reported.  
<sup>3</sup> Included in "Total income."  
<sup>4</sup> Grating permits.  
<sup>5</sup> Includes some agricultural lands.  
<sup>6</sup> Includes some unit lands.  
<sup>7</sup> 1917 report.  
<sup>8</sup> 1916 report.  
<sup>9</sup> As reported.  
<sup>10</sup> 1917 report included agricultural lands.  
<sup>11</sup> Hay leases.  
<sup>12</sup> Hay permits.  
<sup>13</sup> Estimated.  
<sup>14</sup> Including grating permits.

TABLE 12.—Use of grazing lands belonging to Indians, fiscal year ended June 30, 1913—Continued.

States and reservations.	Area of lands.		Grazed by Indian stock.		Indians engaged in stock raising.	Leased.							
	Allotted.	Unallotted.	Allotted.	Unallotted.		Allotted.			Unallotted.				
						Number of lease- holders.	Area.	Income.	Num- ber of leases.	Area.	Income.	Total income.	
Nevada.....	Acres. 98,006	Acres. 685,784	Acres. 16,055	Acres. 613,019	1,156	20	454	Acres. 70,685	\$1,663	13	Acres. 179,000	\$14,105	\$15,768
Fallon.....	.....	.....	.....	.....	68	.....	.....	.....	.....	.....	.....	.....	.....
Fort McDermitt.....	.....	.....	.....	.....	150	.....	.....	.....	.....	.....	.....	.....	.....
Mojave River.....	1,062	2,940	1,062	1,175	40	.....	.....	.....	.....	.....	.....	.....	.....
Nevada.....	1,250	.....	1,250	.....	35	.....	.....	.....	.....	.....	.....	.....	.....
Walker River.....	8,443	301,000	8,443	120,000	71	.....	.....	.....	.....	.....	.....	.....	.....
Western Shoshone.....	.....	71,824	.....	71,824	132	.....	.....	.....	.....	.....	.....	.....	.....
Reno, special agent.....	88,250	320,010	.....	320,010	600	20	454	.....	1,663	12	(1)	10,655	10,655
New Mexico.....	696,477	6,609,826	104,143	5,565,756	11,013	170	612	100,944	10,384	21	564,130	22,441	32,825
Jicostilla.....	248,477	356,647	59,343	137,767	53	170	612	100,944	10,384	21	218,890	5,941	16,325
Mescalero.....	.....	390,000	.....	102,140	745	.....	.....	.....	.....	.....	285,260	15,000	15,000
Pueblo Bonito.....	448,000	1,500,000	448,000	1,000,000	3,500	.....	.....	.....	.....	.....	.....	.....	.....
Pueblo day schools.....	.....	499,179	.....	454,029	2,015	.....	.....	.....	.....	.....	.....	.....	.....
San Juan.....	.....	3,792,800	.....	3,792,800	1,200	.....	.....	.....	.....	.....	.....	.....	.....
Zuni.....	.....	112,000	.....	112,000	1,200	.....	.....	.....	.....	.....	.....	.....	.....
North Carolina: Cherokee.....	.....	57,000	.....	57,000	450	.....	.....	.....	.....	.....	.....	.....	.....
North Dakota.....	1,727,565	175,876	1,269,249	86,961	2,163	1,248	1,760	359,875	49,453	15	103,925	15,589	65,042
Fort Berthold.....	331,461	175,876	280,427	86,961	490	100	600	122,188	18,324	15	103,925	15,589	33,913
Fort Totten.....	48,822	.....	48,822	.....	200	15	15	.....	.....	.....	.....	.....	.....
Standing Rock.....	1,182,283	.....	1,000,000	.....	923	781	748	182,282	22,069	.....	.....	.....	.....
Turtle Mountain.....	165,000	.....	100,000	.....	550	352	352	64,585	7,615	.....	.....	.....	.....
Oklahoma.....	1,451,297	1,060	134,905	320	1,919	6,650	4,962	819,868	467,517	1	640	512	468,029
Cantonment.....	16,615	.....	1,200	.....	138	134	134	12,611	19,173	.....	.....	.....	.....
Cheyenne and Arapaho.....	95,117	.....	8,590	.....	74	825	825	180,741	118,769	.....	.....	.....	.....
Five Civilized Tribes.....	48,062	.....	48,062	.....	591	591	591	48,062	4,763	.....	.....	.....	.....
Kiowa.....	141,901	.....	6,711	.....	480	1,124	1,000	128,620	76,912	.....	.....	.....	.....
Ojawa.....	903,658	.....	49,445	.....	136	1,080	1,078	349,585	106,778	.....	.....	.....	.....
Otoe.....	52,974	720	24,113	.....	210	817	260	38,458	15,728	.....	.....	.....	.....

Pawnee.....	31,280	3,080	104	387	28,277	183,944	53,944
Pawnee.....	41,740	16,380	217	500	25,360	19,800	19,800
Pawnee.....	41,094	6,400	173	238	28,685	26,009	26,009
Pawnee.....	51,816	2,000	91	1,280	18,940	25,968	25,968
Pawnee.....	28,021	16,866	287	183	51,337	16,037	26,289
Oregon.....	280,059	589,580	1,018	327	348	8	200,320
Klamath.....	127,840	58,614	370	324	51,337	15,947	28,265
Klamath.....	28,600	2,300	38	8	150	80	80
Umatilla.....	113,810	13,460	395	8	150	80	2,924
Warm Springs.....	114,309	78,000	215	8	150	80	2,924
South Dakota.....	4,766,812	946,906	4,349	7,471	1,650,384	318,879	535,927
Cheyenne River.....	973,422	594,012	367	980	10,267,910	12,615	2,523,301
Chow Creek.....	305,820	20,000	221	799	95,685	12,615	96,900
Lower Brule.....	141,880	38,000	100	82	13,120	1,574	1,574
Pine Ridge.....	2,449,180	176,570	1,368	3,129	923,489	105,280	105,436
Rosebud.....	667,273	1,616,589	1,485	1,912	420,100	93,289	93,289
Sisseton.....	175,589	446,680	1,485	1,912	420,100	93,289	93,289
Yankton.....	38,569	13,000	383	1,700	8,561	1,632	1,632
Yankton.....	38,569	74,852	400	360	31,619	28,237	28,237
Utah.....	20,397	280,230	301	3	520	235	1,172
Goshute.....	34,020	34,020	25	3	520	235	1,172
Shirwits.....	6,120	6,120	2	3	520	235	1,172
Uintah and Ouray.....	210,080	6,957	274	3	520	235	1,172
Washington.....	525,722	1,478,195	1,756	125	10,500	20,785	645,554
Colville.....	217,603	896,622	336	125	10,500	20,785	645,554
Cushman.....	7,042	197,890	81	3	10,500	20,785	645,554
Neah Bay.....	3,170	3,170	82	3	10,500	20,785	645,554
Spokane.....	13,170	6,000	83	3	10,500	20,785	645,554
Taholah.....	2,640	6,640	24	3	10,500	20,785	645,554
Tulalip.....	12,348	7,915	150	3	10,500	20,785	645,554
Yakima.....	268,919	584,853	1,050	120	9,500	20,750	429,854
Wisconsin.....	23,280	199,604	615	105	3,470	3,185	3,185
Hayward.....	12,300	12,300	140	105	3,470	3,185	3,185
Keshena.....	184,564	184,564	84	105	3,470	3,185	3,185
Leona.....	12,790	12,790	200	105	3,470	3,185	3,185
Le Pointe.....	10,760	2,250	170	105	3,470	3,185	3,185
Red Cliff.....	10,760	1,180	21	105	3,470	3,185	3,185
Wyoming: Shoshone.....	169,284	503,406	382	105	3,470	3,185	3,185

<sup>1</sup> Not reported. <sup>2</sup> As reported. <sup>3</sup> Estimated. <sup>4</sup> Includes agricultural leases. <sup>5</sup> 1917 report. <sup>6</sup> Includes agricultural land. <sup>7</sup> Coded lands not included. <sup>8</sup> Includes some agricultural lands. <sup>9</sup> Includes some agricultural lands. <sup>10</sup> Includes some agricultural lands.

TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1918.*

States and superintendencies.	Total employed.		Indians employed by United Indian service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Minors or out-going pupils.	
	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.	Number.	Earnings.
<b>Total, 1918.....</b>	<b>27,032</b>	<b>\$3,199,850</b>	<b>2,379</b>	<b>\$1,003,316</b>	<b>11,947</b>	<b>\$409,636</b>	<b>10,220</b>	<b>\$1,620,002</b>	<b>2,486</b>	<b>\$106,896</b>
1917.....	24,932	2,506,967	2,137	979,783	12,321	363,673	8,215	1,009,935	2,259	153,366
1916.....	25,948	2,378,377	2,115	922,736	14,587	427,698	6,962	882,784	2,254	145,168
1915.....	25,681	2,304,339	2,533	940,013	13,968	414,422	6,899	826,218	2,281	121,686
1914.....	23,440	2,127,403	2,319	810,950	13,218	505,492	5,653	689,517	2,350	121,444
1913.....	22,793	2,065,124	2,271	782,264	12,290	414,706	5,556	778,117	2,647	110,087
1912.....	22,424	1,940,414	2,516	732,526	12,420	432,470	5,113	673,289	2,375	102,139
1911.....	11,781	1,861,630	1,965	687,089	6,852	582,919	3,204	591,672	( <sup>1</sup> )	( <sup>1</sup> )
1900.....	2,901	963,573	2,064	749,148	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	177,169	807	27,256
<b>Arizona.....</b>	<b>5,943</b>	<b>680,734</b>	<b>328</b>	<b>134,186</b>	<b>2,688</b>	<b>84,163</b>	<b>2,304</b>	<b>411,507</b>	<b>623</b>	<b>60,888</b>
Camp Verde.....	144	28,980	4	1,560	40	7,062	140	27,420	.....	.....
Colorado River.....	178	81,352	20	13,510	40	14,988	118	60,180	.....	.....
Fort Apache.....	1,001	25,668	35	14,988	966	10,680	.....	.....	.....	.....
Fort Mojave.....	33	7,464	7	3,720	.....	.....	.....	.....	26	3,744
Havasupai.....	76	5,526	1	3,900	20	171	55	5,055	.....	.....
Kalab.....	135	3,197	2	225	101	1,265	30	1,407	2	300
Leupp.....	217	11,751	21	5,552	125	3,374	25	250	46	2,575
Moqui.....	76	11,281	36	10,099	40	1,132	.....	.....	.....	.....
Navajo.....	292	38,654	50	24,283	* 81	* 5,090	( <sup>1</sup> )	( <sup>1</sup> )	* 161	* 9,286
Phoenix.....	266	24,112	24	8,909	100	847	.....	.....	142	14,356
Pima.....	789	55,158	32	17,398	* 432	* 24,510	* 120	* 5,250	* 135	* 8,000
Rice Station.....	91	5,228	10	4,089	81	1,137	.....	.....	.....	.....
Salt River.....	499	36,171	11	3,060	23	311	433	29,200	12	3,000
San Carlos.....	780	58,030	36	14,588	500	21,847	244	21,596	.....	.....
San Xavier.....	1,115	256,368	12	4,668	43	3,100	1,000	241,600	60	7,006
Truxton Canon.....	34	2,301	5	722	29	1,579	.....	.....	.....	.....
Western Navajo.....	237	29,495	22	5,910	57	1,408	119	19,550	39	2,667
<b>California.....</b>	<b>3,570</b>	<b>454,335</b>	<b>108</b>	<b>36,784</b>	<b>413</b>	<b>33,931</b>	<b>2,254</b>	<b>324,824</b>	<b>705</b>	<b>58,796</b>
Bishop.....	36	6,470	4	1,245	7	2,725	.....	.....	25	2,500
Campo.....	47	4,475	3	1,500	.....	.....	44	2,975	.....	.....
Digger.....	52	1,650	.....	.....	.....	.....	52	1,650	.....	.....
Fort Bidwell.....	279	7,284	3	1,452	26	1,332	250	4,500	.....	.....
Fort Yuma.....	540	64,060	17	4,560	144	9,000	359	48,900	20	1,000
Greenville.....	507	129,000	2	1,320	25	3,130	410	103,550	70	21,000
Hoopa Valley.....	440	49,292	25	8,949	128	13,843	292	24,000	25	2,500
Malki.....	311	43,375	11	3,018	2	36	268	40,321	.....	.....
Pala.....	269	41,580	11	3,062	16	1,250	236	35,028	6	2,220
Round Valley.....	29	2,179	4	1,584	25	595	.....	.....	.....	.....
Sherman Institute.....	650	34,020	9	4,604	.....	.....	.....	.....	641	29,416
Soboba.....	311	65,553	17	4,930	13	1,163	273	50,300	.....	180
Tule River.....	99	5,397	2	540	27	257	70	4,600	.....	.....
<b>Colorado.....</b>	<b>104</b>	<b>8,411</b>	<b>10</b>	<b>4,080</b>	<b>91</b>	<b>4,181</b>	<b>3</b>	<b>150</b>	.....	.....
Southern Ute.....	100	7,031	6	2,700	91	4,181	3	150	.....	.....
Ute Mountain.....	4	1,380	4	1,380	.....	.....	.....	.....	.....	.....
<b>Florida: Seminole.....</b>	<b>185</b>	<b>3,300</b>	.....	.....	.....	.....	<b>185</b>	<b>3,300</b>	.....	.....
<b>Idaho.....</b>	<b>371</b>	<b>44,665</b>	<b>53</b>	<b>19,550</b>	<b>264</b>	<b>11,115</b>	<b>49</b>	<b>14,000</b>	.....	.....
Coeur d'Alene.....	71	21,910	15	7,480	4	450	49	14,000	.....	.....
Fort Hall.....	292	17,875	32	7,210	280	10,665	.....	.....	.....	.....
Fort Lapwai.....	8	4,880	8	4,880	.....	.....	.....	.....	.....	.....
<b>Iowa: Sac and Fox.....</b>	<b>33</b>	<b>5,663</b>	<b>10</b>	<b>5,360</b>	<b>23</b>	<b>308</b>	.....	.....	.....	.....
<b>Kansas.....</b>	<b>110</b>	<b>14,512</b>	<b>20</b>	<b>11,899</b>	<b>9</b>	<b>178</b>	.....	.....	<b>81</b>	<b>2,435</b>
Haskell Institute.....	90	8,455	9	6,020	.....	.....	.....	.....	81	2,435
Kickapoo.....	18	5,457	9	5,279	9	178	.....	.....	.....	.....
Potawatomi.....	2	600	2	600	.....	.....	.....	.....	.....	.....

<sup>1</sup> Included with adults by private parties.<sup>2</sup> No data obtainable.<sup>1</sup> 1917 report.<sup>2</sup> 1916 report.

TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1918—Continued.*

States and superintendancies.	Total employed.		Indians employed by United Indian service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Minors or out- ing pupils.	
	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.
Michigan.....	14	\$6,414	14	\$6,414						
Mackinac.....	1	574	1	574						
Mount Pleasant.....	13	5,840	13	5,840						
Minnesota.....	1,058	131,514	168	67,298	614	\$23,331	269	\$40,540	7	\$350
Cass Lake.....	22	2,416	6	2,245	16	171				
Fond du Lac.....	9	4,500	9	4,500						
Grand Portage.....	12	1,449	13	1,960	19	1,489				
Leech Lake.....	217	31,163	33	12,422	46	1,641	138	17,200		
Nett Lake.....	178	19,626	8	2,110	70	1,016	100	16,800		
Pipestone.....	46	8,650	10	5,700	9	1,000	20	1,600	7	350
Red Lake.....	280	32,606	46	15,831	223	11,838	11	4,940		
Vermillion Lake.....	25	6,760	10	6,460	15	300				
White Earth.....	269	24,041	43	17,065	226	6,976				
Montana.....	1,982	337,064	184	71,170	1,424	68,246	374	197,668		
Blackfeet.....	196	113,869	34	17,728	42	14,861	120	81,290		
Crow.....	407	27,724	40	16,751	367	10,972				
Flathead.....	207	63,501	37	5,814	30	287	140	57,400		
Fort Belknap.....	564	33,812	19	7,628	545	26,184				
Fort Peck.....	110	40,240	26	11,600	25	2,250	59	35,390		
Rocky Boy's Agency	74	24,856	4	231	15	1,027	55	23,598		
Tongue River.....	424	24,062	24	11,418	400	12,644				
Nebraska <sup>1</sup> .....	84	30,538	46	21,790	4	278	34	8,470		
Genoa.....	11	5,890	11	5,890						
Omaha.....	4	1,860	4	1,860						
Winnebago.....	69	23,068	31	14,340	4	278	34	8,470		
Nevada.....	1,098	103,311	43	16,415	412	8,876	553	72,320	90	5,700
Carson.....	146	12,960	10	5,680	46	1,600			90	5,700
Fallon.....	193	20,030	3	930			190	28,100		
Fort McDermitt.....	188	33,628	6	1,127	17	201	165	32,300		
Moapa River.....	39	4,062	3	552			36	3,500		
Nevada.....	10	4,422	9	3,702	1	720				
Walker River.....	224	11,770	4	1,740	58	1,610	162	8,420		
Western Shoshone.....	298	7,429	8	2,684	290	4,745				
New Mexico.....	1,836	196,739	232	73,318	788	17,799	539	93,808	277	10,824
Albuquerque.....	146	9,414	12	5,220	27	790			106	3,404
Jicarilla.....	423	32,935	57	13,291	252	7,614	116	12,130		
Mescalero.....	290	15,102	29	10,505	217	1,850	33	2,687	2	60
Pueblo Bonito.....	16	5,840	16	5,840						
Pueblo day schools.....	346	86,047	57	12,226	39	1,145	248	71,281	22	1,396
San Juan.....	250	24,662	36	13,636	64	2,226	100	5,600	80	3,000
Santa Fe.....	186	10,442	16	7,160	53	817			117	2,966
Zuni.....	189	11,797	11	5,740	196	3,947	42	2,110		
New York: New York Agency.....	29	203			29	203				
North Carolina: Cherokee.....	357	68,686	13	5,760	40	2,576	394	70,300		
North Dakota.....	1,796	68,296	126	53,329	1,663	14,616			9	350
Fort Berthold.....	75	10,768	22	9,318	53	1,450				
Fort Totten.....	33	10,309	21	10,040	12	299				
Standing Rock <sup>1</sup> .....	1,560	36,930	64	25,722	1,496	11,208				
Turtle Mountain.....	117	7,369	15	5,680	102	1,089				
Wahpeton.....	13	2,919	4	2,569						350

<sup>1</sup>1917 report.<sup>2</sup>Estimated<sup>1</sup>Does not include Santee now under Yankton, S. Dak.<sup>2</sup>Includes 27 in Army

TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Total employed.		Indians employed by United Indian service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Minors or out-ling pupils.	
	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.	Num-ber.	Earn-ings.
Oklahoma.....	706	\$203,550	315	\$190,431	388	\$6,182	32	\$5,200	61	\$1,727
Cantonment.....	62	9,180	12	4,586	21	594	29	4,000		
Cheyenne and Arapaho.....	44	9,967	32	9,800	12	157				
Chilocco.....	322	15,199	19	11,108	262	2,302			61	1,727
Choctaw-Choctaw Sanatorium.....	4	880	4	880						
Five Civilized Tribes.....	92	80,600	92	80,600						
Kiowa.....	69	26,128	58	26,061	16	1,077				
Osage.....	17	14,140	17	14,140						
Otoe.....	2	1,260	2	1,260						
Pawnee.....	7	3,530	7	3,530						
Ponca.....	14	6,820	14	6,820						
Sac and Fox.....	5	3,920	5	3,920						
Seger.....	50	7,663	16	5,829	31	634	3	1,200		
Seneca.....	8	4,080	8	4,080						
Shawnee.....	14	7,180	14	7,180						
Total.....	720	190,517	295	178,816	332	4,764	32	5,200	61	1,727
Five Civilized Tribes Schools.....	76	13,033	20	11,615	56	1,418				
Armstrong Academy.....	10	3,497	3	3,312	7	185				
Bloomfield Academy.....	2	701	1	576	1	125				
Cherokee Training.....	35	1,596	2	879	33	717				
Eufaula Boarding.....	1	310	1	310						
Jones Academy.....	10	1,135	1	900	9	235				
Mekuskey Academy.....	2	14			2	14				
Nuyaka Boarding.....	10	3,417	6	3,275	4	142				
Tuskahoma Academy.....	1	540	1	540						
Wheelock Academy.....	5	1,823	5	1,823						
Oregon.....	329	44,023	89	35,995	240	8,028				
Klamath <sup>1</sup> .....	160	11,683	15	7,594	145	4,089				
Salem.....	29	11,108	27	10,827	2	576				
Siletz.....	6	2,904	6	2,904						
Umatilla.....	44	8,203	20	5,672	24	2,531				
Warm Springs.....	90	10,130	21	9,298	69	832				
Pennsylvania: Carlisle.....	494	39,239	9	4,519	9	4			476	34,718
South Dakota.....	2,655	272,393	327	126,485	1,528	52,558	999	83,200	1	159
Cheyenne River.....	618	30,474	46	17,988	572	12,486				
Crow Creek.....	211	17,610	27	15,123	184	2,487				
Flandreau.....	31	8,048	16	6,991	14	907			1	159
Lower Brule.....	83	9,503	15	6,804	67	2,199	1	500		
Pierre.....	27	2,783	8	2,549	19	234				
Pine Ridge.....	1,097	108,661	100	38,848	332	6,413	665	58,400		
Rapid City.....	18	4,307	8	4,180	10	147				
Rosebud.....	731	74,868	80	28,675	318	26,883	332	24,300		
Siemeton.....	31	12,389	20	11,737	11	652				
Springfield.....	2	1,000	2	1,000						
Yankton <sup>2</sup> .....	16	7,760	15	7,610	1	150				
Utah.....	576	57,931	29	9,422	199	6,109	348	72,400		
Goshute.....	341	71,811	1	594	40	1,217	300	70,000		
Shivwits.....	75	3,324	2	324	25	800	48	2,400		
Uintah and Ouray.....	160	12,796	26	8,504	134	4,292				

<sup>1</sup> 1911 report.<sup>2</sup> Includes Santee, formerly listed in Nebraska.

TABLE 13.—*Employment of Indians during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Total employed.		Indians employed by United Indian service.				Employed by private parties.			
			Regular employees.		Irregular employees.		Adults.		Minors or out- ing pupils.	
	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.	Num- ber.	Earn- ings.
Washington.....	1,332	\$146,687	103	\$43,929	351	\$10,168	878	\$92,590	.....	.....
Colville.....	276	42,758	21	12,368	229	5,970	26	24,420	.....	.....
Cushman.....	679	54,528	12	5,070	1	8	666	49,450	.....	.....
Neah Bay.....	22	2,710	7	2,542	15	168	.....	.....	.....	.....
Spokane.....	361	2,428	8	1,863	28	566	.....	.....	.....	.....
Taholah.....	28	2,564	8	2,244	.....	.....	20	32	.....	.....
Tulalip.....	195	28,685	20	8,615	9	1,670	166	18,400	.....	.....
Yakima.....	96	13,014	27	11,227	69	1,787	.....	.....	.....	.....
Wisconsin.....	1,498	191,954	108	44,843	229	6,436	1,095	139,725	66	\$960
Hayward.....	464	30,480	17	9,480	40	1,500	367	18,900	40	600
Kanbena.....	79	12,280	23	11,767	46	1,493	.....	.....	.....	.....
Lac du Flambeau...	141	10,688	14	7,855	127	2,714	.....	.....	.....	.....
Leona.....	32	2,970	2	1,630	.....	.....	30	1,350	.....	.....
La Pointe.....	513	63,188	7	3,036	6	152	500	60,000	.....	.....
Onesida.....	14	5,373	14	5,373	.....	.....	.....	.....	.....	.....
Red Cliff.....	232	62,945	8	2,820	3	300	196	59,475	20	350
Tomah.....	23	3,069	16	2,792	7	277	.....	.....	.....	.....
Wyoming: Shoshone...	570	60,719	29	10,344	541	50,375	.....	.....	.....	.....



TABLE 14.—Vital statistics, housing, and disease during fiscal year ended June 30, 1918.

States and superintendences.	Popula- tion.	Births and deaths.			Disease.						Housing.		Houses having wooden floors.	
		Births.	Deaths.		Indians exam- ined.	Found with—				Families living in—				
			Total.	Under 3 years.		Due to tuber- culosis.	Latent tuber- culosis.	Active tuber- culosis.	Tuber- culosis.	Trach- oma.	Perma- nent houses.			Ten- tative, tepees, etc.
											Estimated hav- ing—	Number families using milk cows.		
Grand total.....	205,249	5,871	4,682	1,541	1,266	64,272	3,067	3,941	12,474	28,021	30,375	48,011	10,794	37,976
Arizona.....	44,499	990	748	223	237	10,797	300	461	3,241	3,627	6,336	4,563	5,624	710
Camp Verde.....	435	16	20	7	2	117	2	3	15	6	33	113	.....	.....
Colorado River.....	1,184	31	52	13	14	763	.....	47	67	260	67	58	288	51
Fort Apache.....	2,456	120	64	12	8	1,202	.....	70	31	270	150	6	659	18
Havasupai.....	171	4	6	2	.....	21	1	1	5	6	7	8	37	6
Kalabab.....	102	4	4	3	.....	22	.....	2	2	30	.....	22	297	6
Leupp.....	1,441	175	95	28	7	360	.....	11	96	184	480	6	19	65
Moqui.....	4,225	80	65	36	13	502	78	72	140	456	1,400	503	300	366
Navajo.....	12,080	279	194	61	( <sup>1</sup> )	2,535	130	101	609	1,960	1,500	1,401	1,600	33
Pima.....	6,253	46	23	13	( <sup>1</sup> )	2,535	130	101	1,902	470	1,500	1,401	268	80
Salt River.....	1,277	24	60	13	( <sup>1</sup> )	2,535	130	101	1,902	470	1,500	1,401	268	80
San Carlos.....	2,623	46	23	13	( <sup>1</sup> )	2,535	130	101	1,902	470	1,500	1,401	268	80
San Xavier.....	6,227	200	75	16	3	243	40	27	163	128	360	140	590	40
Truxton Canon.....	450	7	10	.....	40	1,191	.....	76	113	560	175	20	124	9
Western Navajo.....	6,565	100	85	25	40	1,191	.....	76	113	560	175	60	1,140	7
California.....	10,736	201	243	33	69	3,975	63	115	517	337	1,363	2,135	402	1,622
Bishop.....	1,588	15	27	9	7	562	9	19	17	76	17	280	80	120
Campo.....	229	1	8	.....	.....	120	.....	.....	5	.....	.....	13	48	6
Digger.....	299	6	6	.....	.....	13	1	2	.....	9	.....	71	2	69
Fort Bidwell.....	790	12	9	1	2	311	.....	20	283	62	663	75	147	30
Fort Yuma.....	855	17	16	3	3	835	14	4	10	18	10	200	9	20
Greenville.....	693	21	35	7	10	181	8	9	49	24	280	196	24	236
Hoopa Valley.....	1,485	31	31	2	15	250	6	29	35	46	60	330	10	300
Maki.....	634	16	20	6	5	92	6	3	4	13	4	11	109	91
Pala.....	1,025	25	27	1	16	320	9	10	16	33	23	31	199	120
Round Valley.....	1,818	35	38	2	2	600	.....	7	27	6	52	356	.....	353
Soboba.....	926	12	10	1	1	461	.....	5	16	14	33	286	134	134
Tule River.....	443	17	20	2	2	380	.....	5	106	87	238	141	17	136

	877	17	38	13	4	408	2	12	144	26	300	4	138	154	51
Colorado.....	369	9	15	4	.....	160	2	3	85	6	200	4	138	5	49
Southern Ute.....	508	8	18	9	4	1,438	.....	9	50	20	100	.....	.....	140	2
Ute Mountain.....	585	7	7	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	74	.....
Florida: Seminole.....	4,144	103	138	28	48	2,443	47	81	114	324	710	317	743	290	630
Idaho.....	829	31	28	6	6	270	20	11	52	31	82	110	247	.....	304
Coeur d'Alene.....	1,764	43	68	8	28	622	.....	55	35	164	615	18	146	290	76
Fort Hall.....	1,551	24	42	14	19	1,551	37	15	24	129	43	188	360	.....	350
Fort Lapwai.....	356	13	17	6	2	42	.....	8	14	40	20	.....	45	35	35
Iowa: Sac and Fox.....	1,414	34	42	8	8	411	1	8	116	6	223	89	248	.....	425
Kansas.....	637	16	16	6	1	80	.....	.....	48	6	133	49	148	.....	203
Kickapoo.....	777	18	26	2	7	831	11	8	68	.....	100	40	200	.....	222
Potawatomi.....	1,097	.....	.....	.....	.....	500	1	3	8	4	8	25	430	.....	332
Michigan: Mackinac.....	12,003	519	297	83	74	4,052	207	233	606	2,284	2,205	458	2,868	.....	2,243
Minnesota.....	1,087	44	31	5	7	540	15	44	32	104	50	75	200	.....	200
Fond du Lac.....	1,321	11	9	5	.....	175	7	1	14	8	.....	.....	73	.....	51
Grand Portage.....	1,784	66	46	17	13	1,023	35	14	123	108	200	30	870	.....	391
Leech Lake.....	1,614	26	24	3	13	56	5	10	5	15	5	8	117	.....	117
Nott Lake.....	1,466	7	3	2	2	63	23	9	26	31	26	.....	35	.....	24
Pipestone (Birch Cooley).....	6,555	61	64	17	22	448	56	40	276	432	375	130	360	.....	360
Red Lake.....	12,079	304	120	34	17	1,747	67	115	134	1,536	1,550	260	1,211	.....	1,100
White Earth.....	.....	400	347	85	125	5,933	562	306	1,274	1,967	2,789	421	2,791	258	1,774
Montana.....	2,773	96	82	28	18	1,920	48	65	550	247	1,150	.....	605	120	520
Blackfeet.....	1,703	64	71	12	12	1,080	101	43	140	203	221	50	385	.....	260
Crow.....	2,426	43	41	5	18	1,050	29	18	90	99	110	200	543	.....	260
Flathead.....	2,039	39	31	6	14	410	35	21	47	381	250	20	275	.....	190
Fort Belknap.....	2,039	39	31	6	14	410	35	21	47	381	250	20	275	.....	190
Fort Peck.....	2,039	39	31	6	14	410	35	21	47	381	250	20	275	.....	190
Rocky Boy's Agency.....	1,470	11	40	1	3	818	113	195	160	480	300	127	450	70	225
Tongue River.....	.....	49	48	13	36	993	214	69	300	571	750	20	484	51	28
Nebraska.....	2,463	57	69	28	10	1,368	.....	38	47	128	300	7	553	.....	558
Omaha.....	1,377	36	18	8	5	1,368	.....	38	47	128	300	7	553	.....	558
Winnebago.....	1,086	21	51	20	5	1,368	.....	38	47	128	300	7	553	.....	558

Includes 282 patients from other reservations.

\* 1917 report.  
\* No record.

\* Estimated.  
\* No report.

TABLE 14.—Vital statistics, housing, and disease during fiscal year ended June 30, 1918—Continued.

States and superintendences.	Popu- lation.	Births and deaths.			Indians exam- ined.	Disease.				Number families using milch cows.	Housing.		Houses having wooden floors.		
		Births.	Deaths.			Found with—	Estimated hav- ing—		Families living in—						
			Total.	Under 3 years.			Due to tuber- culosis.	Tuber- culosis.			Tubercu- losis.				
												Latent tuber- culosis.		Active tuber- culosis.	Tuber- culosis.
Nevada.....	10,854	231	246	58	29	1,053	48	31	308	245	1,717	56	2,004	832	1,451
Fallon.....	420	6	14	2	4	278	20	7	104	41	131	5	102	48	62
Fort McDermitt.....	349	9	17	1	9	35	(1)	(1)	25	100	142	2	32	53	10
Moapa River.....	113	3	10	4	4	30	6	5	22	14	80	5	12	30	12
Nevada.....	561	18	16	6	4	164	10	11	60	26	110	3	145	100	100
Walker River.....	804	18	28	7	5	256	12	1	74	42	213	7	53	90	63
Western Shoshone.....	607	17	11	3	3	(1)	(1)	(1)	(1)	(1)	1,000	25	60	111	27
Reno, special agent.....	8,000	160	150	35	(1)	6,265	222	228	1,196	3,114	3,205	15	1,600	500	1,250
New Mexico.....	21,186	592	461	438	107	6,265	40	68	17	151	36	184	3,603	1,743	346
Jicarilla.....	621	17	41	14	13	465	12	18	42	232	180	4	177	35	75
Mescalero.....	630	18	17	4	10	1,500	115	34	450	257	450	10	46	193	46
Pueblo Bonito.....	2,724	(1)	(1)	(1)	(1)	2,702	55	94	504	335	963	170	75	440	(1)
Pueblo day schools.....	8,896	276	181	52	42	700	18	10	175	2,134	1,625	30	2,376	135	135
San Juan.....	6,500	218	180	350	40	760	42	4	7	5	11	200	780	1,075	60
Zuni.....	1,815	63	42	18	2	(1)	(1)	(1)	(1)	(1)	(1)	1,600	1,600	1,600	1,600
New York: New York Agency.....	5,982	110	101	25	(1)	322	205	5	15	20	90	450	455	455	455
North Carolina: Cherokee.....	2,343	50	41	6	11	378	473	730	1,288	1,286	1,286	806	2,214	1,183	1,183
North Dakota.....	8,940	211	187	40	83	208	14	13	104	27	200	30	273	200	200
Fort Berthold.....	1,204	67	55	16	29	550	70	105	160	300	550	20	275	168	168
Fort Totten.....	983	28	46	7	24	1,550	121	327	418	879	406	206	796	50	50
Standing Rock.....	3,455	36	40	10	21	1,450	28	28	50	82	140	550	870	765	765
Turtle Mountain.....	3,298	80	46	7	9	4,582	134	389	1,841	2,046	6,120	961	4,251	411	4,001
Oklahoma.....	14,968	540	441	138	90	235	17	49	44	164	145	25	190	143	124
Cantonment.....	780	28	33	15	14	200	.....	.....	75	85	170	23	330	330	330
Cheyenne and Arapaho.....	1,253	53	53	14	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Kiowa.....	4,583	210	178	47	39	2,729	104	155	1,100	1,320	3,000	217	1,100	100	1,000
Ozark.....	2,186	26	19	.....	3	128	.....	3	21	80	170	121	190	.....	.....
Ozark.....	524	31	24	7	.....	71	2	6	41	32	163	100	150	.....	.....
Pawnee.....	716	27	25	11	.....	116	2	2	40	36	233	50	163	.....	.....
Pawnee.....	611	48	29	23	7	300	2	6	120	26	400	28	312	.....	.....
Pawnee.....	1,080	61	48	29	7	178	7	.....	25	7	272	40	128	.....	.....
Pawnee.....	1,683	12	11	2	.....	635	.....	158	375	286	560	14	145	55	119
Pawnee.....	777	22	26	2	7	(1)	(1)	(1)	(1)	(1)	(1)	145	134	74	243
Pawnee.....	1,707	47	8	2	2	(1)	(1)	.....	.....	.....	.....	145	134	74	140
Pawnee.....	750	24	10	4	2	(1)	(1)	.....	.....	.....	.....	198	720	.....	500
Shawnee.....	3,657	109	103	38	13	1,071	54	26	97	276	291	182	981	29	1,319
Oregon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Klamath.....	1,180	46	38	15	3	457	17	7	23	37	83	90	482	.....	482
Siletz.....	1,466	18	14	1	3	200	3	3	7	16	38	8	36	.....	81
Umatilla.....	1,228	20	23	14	1	325	34	13	22	73	50	43	225	15	560
Warm Springs.....	822	19	22	8	4	89	.....	3	35	160	200	14	212	14	226
South Dakota.....	22,879	735	611	154	208	10,198	753	978	1,010	3,644	1,769	1,315	7,721	133	4,238
Chayenne River.....	2,845	172	77	24	35	2,018	108	59	372	368	448	137	1,231	.....	740
Crow Creek.....	970	44	38	13	20	172	12	23	46	140	130	60	220	.....	280
Flandreau.....	293	7	18	1	3	456	20	14	76	84	77	4	167	.....	130
Lower Brule.....	513	24	18	1	2	276	26	29	50	71	200	26	199	.....	113
Pine Ridge.....	7,340	241	145	57	67	3,204	463	501	189	1,510	220	344	2,803	40	1,230
Rosebud.....	2,521	82	197	27	61	2,293	26	125	142	1,295	220	219	1,750	25	1,609
Sisseton.....	2,280	67	56	9	14	800	60	27	30	137	225	350	1,425	1	425
Yankton.....	3,117	106	69	20	13	905	.....	200	90	90	249	176	936	67	870
Utah.....	1,704	69	69	20	19	632	15	28	153	109	390	18	234	125	201
Godshute.....	423	12	13	5	8	13	.....	2	11	42	45	.....	40	20	40
Shilwits.....	119	1	12	1	2	59	1	1	57	6	115	.....	38	10	10
Utah and Ouray.....	1,162	56	44	14	7	580	14	25	86	61	230	18	136	89	181
Washington.....	11,092	233	235	73	77	2,701	180	279	664	1,719	1,295	407	2,859	62	2,501
Colville.....	2,566	54	54	11	18	1,035	.....	111	314	403	340	199	565	3	590
Cushman.....	2,843	25	26	7	7	418	10	9	26	95	204	46	401	.....	298
Neah Bay.....	682	22	24	6	4	108	2	.....	.....	21	100	13	983	.....	298
Spokane.....	104	13	17	6	3	103	.....	21	6	2	.....	40	136	.....	149
Taitah.....	734	12	8	4	3	432	25	3	3	.....	20	24	231	.....	170
Tulalip.....	1,333	43	51	15	14	482	25	32	73	85	151	86	341	9	260
Yakima.....	3,000	56	56	24	24	876	33	101	242	1,120	500	.....	850	50	850

\* No physician.  
 \* As reported.  
 \* Includes some Indians in California formerly under Roseburg, Oreg.

† No record.  
 ‡ 1917 report.  
 § Partly reported.

TABLE 14.—*Vital statistics, housing, and disease during fiscal year ended June 30, 1918—Continued.*

States and superintendences.	Popula- tion.	Births and deaths.				Indians exam- ined.	Disease.						Housing.	Houses having wooden floors.	
		Births.	Deaths.				Found with—			Estimated hav- ing—					Families living in—
			Total.	Under 3 years.	Due to tuber- culosis.		Latent tuber- culosis.	Active tuber- culosis.	Tra- choma.	Tuber- culosis.	Tra- choma.				
Wisconsin.....	9,696	293	216	38	57	2,701	273	208	223	1,263	437	711	2,336	258	2,238
Grand Rapids <sup>1</sup> .....	1,372	39	29	6	5	15	.....	6	16	92	31	8	75	226	75
Hayward.....	1,276	41	41	7	21	250	112	45	35	310	35	50	408	.....	408
Keshena.....	1,758	64	64	16	20	976	16	82	86	213	175	112	383	.....	221
Lac du Flambeau.....	1,744	14	16	6	6	249	5	29	75	101	120	20	222	.....	203
Leona.....	355	29	9	1	1	65	13	3	3	37	8	75	84	32	84
La Pointe.....	1,054	26	18	2	3	627	100	28	8	250	8	125	440	.....	500
Onida.....	2,610	69	34	2	2	144	.....	7	.....	225	50	300	553	.....	553
Red Cliff.....	527	11	6	.....	.....	275	27	8	.....	35	.....	21	194	.....	194
Wyoming: Shoshone.....	1,696	57	35	8	.....	870	50	31	157	585	550	20	124	564	50

1917 report.

## SUMMARY.

Birth rate per 1,000 Indian population..... 29.42  
 Death rate per 1,000 Indian population..... 24.73

<sup>1</sup> Exclusive of Five Civilized Tribes in which the birth rate exceeds the death rate; normal ratio.

TABLE 15.—Hospitals and sanatoria in Indian Service, fiscal year ended June 30, 1918.

States and superintendencies.	Agency or school hospital or sanatorium.	Number.	Character of construction.	Capacity.	Patients in hospital June 30, 1917.	During fiscal year 1918.			Remaining in hospital June 30, 1918.
						Admitted.	Total treated.	Discharged.	
Total, 1918.		87		2,411	605	16,888	17,441	16,725	522
1917.		81		2,273	488	16,452	16,940	16,156	605
1916.		81		2,283	352	15,314	15,660	14,968	520
1915.		74		2,045	452	11,799	12,201	11,648	467
1914.		151		1,432	457	11,103	11,590	11,086	424
1913.		48		1,358	296	9,475	9,771	9,231	478
1912.		53		1,256	283	9,257	9,515	9,141	306
1911.		50		1,268	330	8,078	8,408	7,940	403
1900.		4				4,176			
1888.		4				2,198			
Arizona.		15		445	162	1,951	2,113	1,972	115
Colorado River.	Agency.	1	Adobe.	3		42	42	42	
Fort Apache.	do.	1	Frame.	40	4	226	330	327	3
Fort Mojave.	School.	1	Brick.	8		96	96	98	1
Leupp.	Agency.	1	Stone.	8		136	136	136	
Mogul.	do.	1	do.	40					
Navajo.	School.	1	Frame.	40	36	339	376	375	
Do.	Sanatorium.	1	do.	20	18	21	39	16	18
Phoenix.	School.	1	Brick.	66	5	559	564	556	1
Do.	Sanatorium.	1	Frame.	120	90	47	137	48	79
Pima.	do.	1	do.	60	9	63	72	61	9
Rice Station.	School.	1	Stone.	15		103	103	103	
San Carlos.	Agency.	1	Camp.	4					
Truxton Canon.	School.	1	Brick.	8		107	107	107	
Do.	Agency.	1	Camp.	5		35	35	32	3
Western Navajo.	School.	1	Stone.	8		77	77	76	1
California.		5		171	19	1,211	1,220	1,204	20
Fort Bidwell.	School.	1	Frame.	12		57	57	57	
Fort Yuma.	School and agency.	1	do.	25	7	221	228	223	10
Greenville.	do.	1	do.	9	2	187	189	187	1
Hopps Valley.	do.	1	do.	25		83	82	76	6
Sherman Institute.	School.	1	Brick.	100	10	654	664	661	3

<sup>1</sup> Does not include rooms used in dormitories used for ill pupils.

<sup>2</sup> Includes rooms in dormitories used for ill pupils.

<sup>3</sup> Cases treated during year by physicians not all in hospitals.

<sup>4</sup> Closed owing to lack of physicians and nurses.

<sup>5</sup> 1917 report.

<sup>6</sup> Hospital and sanatorium.

TABLE 15.—Hospitals and sanatoria in Indian service, fiscal year ended June 30, 1918—Continued.

States and superintendencies.	Agency or school hospital or sanatorium.	Number.	Character of construction.	Capacity.	Patients in hospital June 30, 1917.	During fiscal year 1918.				Remaining in hospital June 30, 1918.
						Admitted.	Total treated.	Discharged.	Died.	
Idaho.....		4		142	64	108	232	185	9	38
Coeur d'Alene <sup>1</sup> .....	School and agency	1	Brick.....	30	.....	11	11	9	2	.....
Fort Hall.....	do.....	2	Stone.....	112	.....	72	72	71	1	.....
Fort Lapwai.....	Sanatorium.....	1	Frame.....	100	64	85	149	105	6	38
Iowa: Sac and Fox.....	Sanatorium.....	1	Brick.....	80	40	73	113	66	8	30
Kansas: Haskell Institute.....	School.....	1	do.....	70	4	1,200	1,204	1,255	5	4
Michigan: Mount Pleasant.....	do.....	1	do.....	24	2	308	310	307	3	.....
Minnesota.....		5		108	24	939	933	933	11	19
Fond du Lac.....	Agency.....	1	Frame.....	30	10	187	197	189	2	6
Leech Lake.....	Agency and school	1	do.....	8	.....	99	99	87	2	.....
Pipestone.....	School.....	1	Stone.....	16	1	114	115	114	1	.....
Red Lake.....	Agency and school	1	Frame.....	30	4	343	347	341	1	5
White Earth.....	do.....	1	do.....	24	9	208	215	212	5	8
Montana.....		5		71	5	381	386	376	6	4
Blackfeet.....	Sanatorium.....	1	Frame.....	24	3	40	43	40	.....	3
Crow.....	Agency and school	1	do.....	24	2	114	116	109	6	1
Flathead.....	Agency.....	1	do.....	4	.....	3	3	3	.....	.....
Do. <sup>1</sup> .....	Tent houses.	1	Frame and canvas.	5	.....	.....	.....	.....	.....	.....
Fort Peck <sup>1</sup> .....	Agency and school	1	Brick.....	14	.....	224	224	224	.....	.....
Nebraska.....		2		136	12	828	840	808	19	13
Genoa.....	School.....	1	Frame.....	86	.....	292	292	299	3	.....
Winnebago.....	Agency.....	1	Brick.....	50	12	556	578	549	16	13
Nevada.....		5		66	8	381	389	374	7	8
Carson.....	School.....	1	Frame.....	14	.....	235	235	235	.....	.....
Do.....	Sanatorium.....	1	do.....	20	8	103	111	99	4	8
Fort McDermitt.....	Agency and school	1	Stone.....	8	.....	7	7	4	3	.....
Moapa River.....	Agency.....	1	Frame.....	4	.....	4	4	4	.....	.....
Western Shoshone.....	do.....	1	do.....	20	.....	32	32	32	.....	.....

New Mexico.....	10	241	44	1,708	1,753	1,990	15	41
Albuquerque.....	1	44	.....	264	264	264	.....	.....
Jicarilla.....	1	8	.....	120	120	119	1	.....
Do.....	1	25	.....	45	45	39	.....	6
Mescalero.....	1	20	15	63	78	69	2	7
Pueblo Bonito.....	1	12	2	102	102	102	1	1
Pueblo day schools.....	1	34	22	44	66	37	4	25
San Juan.....	1	8	5	645	550	546	4	.....
Do.....	1	20	.....	205	205	204	1	.....
Santa Fe.....	1	50	.....	210	210	209	1	.....
School.....	1	20	.....	110	110	107	1	2
Zuni.....	1	26	.....	122	122	120	2	.....
Agency and school.....	4	94	22	530	552	519	12	21
North Carolina: Cherokee.....	1	.....	.....	.....	.....	.....	.....	.....
North Dakota.....	4	.....	.....	.....	.....	.....	.....	.....
Fort Totten.....	1	20	.....	59	59	59	.....	.....
Standing Rock.....	1	30	7	228	235	220	8	7
Turtle Mountain.....	1	20	15	92	107	92	2	13
Wabpeton.....	1	24	.....	151	151	148	2	1
Oklahoma.....	7	191	50	1,543	1,563	1,504	20	69
Cheyenne and Arapaho.....	1	20	2	47	49	34	3	12
Chilocco.....	1	35	1	241	242	339	1	2
Choctaw-Chickasaw.....	1	60	20	188	206	171	5	32
Kiowa.....	1	50	25	687	712	680	9	23
Osage.....	1	8	.....	83	83	83	.....	.....
Pawnee.....	1	6	.....	49	49	49	.....	.....
Seeger.....	1	12	2	148	150	148	2	.....
Oregon: Salem.....	1	36	30	698	728	721	3	4
Pennsylvania: Carlisle.....	1	59	7	578	585	576	2	7
South Dakota.....	8	256	83	1,891	1,974	1,874	15	85
Canton Asylum <sup>1a</sup> .....	11	92	67	29	96	6	9	81
Cheyenne River.....	1	36	4	224	228	224	3	1
Crow Creek.....	1	12	7	183	190	189	1	.....
Flandreau.....	1	24	.....	406	406	405	.....	1
Pierre.....	1	30	.....	595	595	594	1	.....
Pine Ridge <sup>12</sup> .....	1	20	.....	50	50	50	.....	.....
Rapid City.....	1	12	.....	138	138	138	.....	.....
Rosebud.....	1	30	5	265	271	268	1	2

<sup>1</sup> Four small frame bungalows for tubercular patients.

<sup>2</sup> Laguna Sanatorium.

<sup>3</sup> 1917 report.

<sup>4</sup> An asylum for insane Indians from all parts of the United States.

<sup>5</sup> Several buildings.

<sup>6</sup> Closed since November, 1917, on account of lack of fuel shortage.

<sup>1a</sup> Catholic Mission hospital; Government physician.

<sup>2</sup> Two buildings, agency hospital 4; school hospital 8.

<sup>3</sup> Several buildings; data from supervisor's report.

<sup>4</sup> Several buildings.

<sup>5</sup> Closed since November, 1917, on account of lack of fuel shortage.

<sup>6</sup> Supervisor's report.



TABLE 15.—Hospitals and sanatoria in Indian service, fiscal year ended June 30, 1918—Continued.

States and superintendencies.	Agency or school hospital or sanatorium.	Number.	Character of construction.	Capacity.	Patients in hospital June 30, 1917.	During fiscal year 1918.				Remaining in hospital June 30, 1918.
						Admitted.	Total treated.	Discharged.	Died.	
Utah: Uintah and Ouray.....	Agency.....	1	Frame.....	12	3	113	116	110	1	5
Washington.....		4		89	7	963	1,000	975	6	19
Cushman.....	School.....	1	Frame.....	45	.....	670	670	656	3	11
Spokane.....	Agency <sup>1</sup> .....	1	.....do.....	20	4	56	60	51	1	8
Tulalip.....	School.....	1	.....do.....	12	3	197	200	198	2	.....
Yakima.....	.....do.....	1	.....do.....	12	.....	70	70	70	.....	.....
Wisconsin.....		5		94	19	1,160	1,179	1,150	13	11
Hayward.....	School.....	1	Brick.....	10	.....	464	464	463	2	.....
Keshena.....	Agency.....	1	Frame.....	30	19	177	196	173	12	11
Neopit Mills.....	Emergency <sup>2</sup> .....	1	.....do.....	6	.....	27	27	25	2	.....
Onida.....	School.....	1	.....do.....	8	.....	217	217	216	1	.....
Tomah.....	.....do.....	1	.....do.....	40	.....	275	275	274	1	.....
Wyoming: Shoshone.....	Agency <sup>3</sup> .....	1	Stone.....	.....	.....	.....	.....	.....	.....	.....

\* To be opened 1919.

\* For mill accidents.

<sup>1</sup>Sanatorium and general hospital.

TABLE 16.—Indians self-supporting and Indians receiving rations and miscellaneous supplies during fiscal year ended June 30, 1918.<sup>1</sup>

States and reservations.	Indians receiving rations.				Indians receiving miscellaneous supplies.			
	Total.		In return for labor.		Total.		In return for labor.	
	Able-bodied adult Indians self-supporting.	Value of rations.	Number.	Value of rations.	Receiving supplies.	Value of supplies.	Able-bodied.	Value of supplies.
Total, 1918.....	53,248	14,080	1,327	\$40,021	4,480	\$119,761	2,031	\$34,554
1917.....	58,598	15,065	1,110	14,284	5,288	82,112	2,473	31,089
1916.....	59,723	16,065	1,930	18,708	4,941	9,024	1,647	1,263
1915.....	59,723	16,065	1,930	18,708	4,941	9,024	1,647	1,263
1914.....	51,761	18,231	2,977	30,196	7,063	137,469	1,365	1,510
1913.....	52,110	14,987	471,394	9,475	8,512	201,917	2,677	1,210
1912.....	51,516	17,166	344,024	13,172	9,045	104,808	1,634	2,080
1911.....	15,987	16,679	400,732	37,262	7,963	93,454	2,046	1,450
1900.....	57,573	15,987	385,165	57,262	5,475	61,096	635	1,539
1840.....	1,231,000	1,231,000	.....	.....	5,759	185,488	.....	.....
1830.....	11,528	11,528	.....	.....	.....	.....	.....	.....
Arizona.....	10,171	790	21,228	62	1,486	12,155	1,187	8,138
Camp Verde.....	150	15	91	15	48	827	48	827
Colorado River.....	698	40	531	40	300	720	150	695
Fort Apache.....	100	112	2,008	178	47	178	35	28
Havasupai.....	55	17	123	3	12	20	9	12
Kaibab.....	54	3	25	3	16	285	16	235
Laup.....	425	.....	.....	.....	211	2,210	211	2,210
Moqui.....	2,000	189	.....	177	200	2,001	180	1,590
Pima.....	3,350	20	323	29	605	4,555	500	2,000
Salt River.....	110	20	17,435	300	41	523	41	523
San Carlos.....	1,000	300	.....	85	6	341	341	341
San Xavier.....	1,979	85	692	.....	(*)	596	(*)	596
Truxton Canon.....	150	.....	.....	.....	.....	.....	.....	.....
Western Navajo.....	2,625	.....	.....	.....	.....	.....	.....	.....
California.....	5,343	355	6,908	773	88	646	44	463
Bishop.....	1,000	17	282	131	.....	.....	20	183
Campo.....	78	21	325	21	19	37	19	37
Digger.....	184	17	746	6	17	88	4	13
Fort Bidwell.....	500	37	1,048	97	15	60	3	60
Fort Yuma.....	492	20	288	20	.....	.....	12	.....

<sup>1</sup> This pertains only to Indians on reservations where rations and miscellaneous supplies are issued.

(\*) Not reported.

\* Only items reported.

\* Estimated.

TABLE 16.—Indians self-supporting and Indians receiving rations and miscellaneous supplies during fiscal year ended June, 30 1918—Continued.

States and reservations.	Able-bodied adult Indians self-supporting.	Indians receiving rations.				Indians receiving miscellaneous supplies.					
		Total.		In return for labor.		Without labor equivalent.		Total.		In return for labor.	
		Receiving rations.	Value of rations.	Number.	Value of rations.	Able-bodied.	Dis-abled.	Receiving supplies.	Value of supplies.	Number.	Value of supplies.
California—Continued.											
Greenfield.....	440	16	90			16		10	98		
Hopps Valley.....	400	109	1,026			105		8	315		
Mader.....	189	17	1,183			17		6	63		
Pala.....	582	18	437			2		(1)	4		
Round Valley.....	900	22	516			22		13	11		
Schools.....	516	20	513			20					
Tule River.....	82	32	454	32	454						
Colorado.....	220	209	8,436			240	150	50	3,334		3,334
Southern Ute.....	30	88	4,836			88		50	3,184		3,184
Ute Mountain.....	200	311	3,600			161	150	(1)	150		150
Idaho: Ft. Hall.....	743	209	8,077				209				
Michigan: Mackinac.....	825										
Minnesota.....	4,365	1,162	17,849	31	1,199	73	1,058	6	400		400
Fond du Lac.....	300	27	908	4	273	23		5	263	4	268
Grand Portage.....	139	82	712			73		48	839		839
Leech Lake.....	900	79	1,458	18	421	61		53	370	22	190
Nell Lake.....	296	36	704			36		1	4	1	4
Pipestone (Birch Cooley).....	100	7	287			7		4	115		115
Red Lake.....	630	176	830			176		32	143		143
White Earth.....	2,000	765	12,980	9	508	746					
Montana.....	1,684	2,840	76,752	501	13,594	685	1,684	608	5,797	60	627
Flathead.....	200	725	33,963	390	12,439	121	214	180	2,504		2,504
Fort Belknap.....	335	90	879			879		47	927	12	351
Fort Peck.....	480	183	5,179			8	145				
Fort Peck Agency.....	875	340	10,117	18	97		322				
Rocky Boy's Agency.....	41	268	4,598	69	1,068	158	69	98	560	48	276
Tongue River.....	53	1,286	22,016	34	(1)	418	834	288	1,816	30	285

Nevada.....	170	2,100					170	2,100	155	819	117	450	3	35	190
Fallen.....	335	122					33	122	17	82				17	82
Fort McDermitt.....	170	127					18	127	15	22			3	12	22
Aloula River.....	60	782					40	782							
Nevada.....	300	302					30	302							
Walker River.....	491	76					12	76	117	680	117	660			
Western Shoshone.....	300	392					40	392	6	66			6	66	66
Reno, Special Agent.....	7,300														
New Mexico.....	7,779	16,300	30	2,677			190	13,853	288	5,798	190	2,933	33	65	2,833
Jicarilla.....	66	12,669	30	2,677			112	9,882	123	2,502	76	2,162	33	15	400
Mescalero.....	50	3,601					78	3,601	50	2,433				50	2,433
Pueblo Bonito.....	2,724								15	575	15	575			
Pueblo day schools.....	4,900								100	216	100	216			
North Carolina: Cherokee.....	1,200	29					2	29							
North Dakota.....	2,708	22,775					1,325	22,775	97	281				97	231
Fort Totten.....	200	281					40	281							
Standing Rock.....	1,200	20,000					1,000	20,000							
Turtle Mountain.....	1,308	2,494					285	2,494	97	231				97	231
Oregon.....	1,080	1,160					65	1,160	20	664				20	664
Klamath.....	500	233					35	233	19	679				19	679
Siletz.....	280	927					30	927	1	16				1	15
Warm Springs.....	300						30								
South Dakota.....	3,357	177,564	650	20,614			2,503	156,960	530	67,733	405	21,271	247	177	46,402
Cheyenne River.....	428	19,407					494	19,407	144	30,064			144		30,064
Crow Creek.....	176	8,765	12	569			147	8,166	428	22,334	405	21,271	22	22	1,063
Flandreau.....	150	508	546	18,414			47								
Lower Brule.....	126	41					41	2,194							
Pine Ridge.....	1,846	62,518					553	62,518	103	15,122			103		15,122
Rosebud.....	883	2,208	90	1,515			1,405	61,020	156	193			155		183
Yankton.....	750	3,511	2	86			49	3,425							
Utah.....	160	526					500	26	11,805	647	18,798		621	26	18,798
Shewits.....	75	127					26	127	26	295				26	295
Uintah and Ouray.....	85	11,078					500	11,078	621	18,503			621		18,503

Not reported.
Estimated.
1917 report.

## 1917 report.

**Estimated.**

**Not reported.**

TABLE 16.—*Indians self-supporting and Indians receiving rations and miscellaneous supplies during fiscal year ended June 30, 1918—Continued.*

States and reservations.	Able-bodied adult Indians self-supporting.	Indians receiving rations.						Indians receiving miscellaneous supplies.					
		Total.		In return for labor.		Without labor equivalent.		Total.		In return for labor.		Without labor equivalent.	
		Receiving rations.	Value of rations.	Number.	Value of rations.	Able-bodied.	Dis-abled.	Receiving supplies.	Value of supplies.	Number.	Value of supplies.	Able-bodied.	Dis-abled.
Washington.....	3,080	127	2,243	8	374	26	98	41	109			35	6
Colville.....	702	13	628	3	294		10	19	14			19	
Cumman.....	280	11	226				11	226					
Neah Bay.....	427	4	28				4	13	3			12	
Spokane.....	330	11	177				11	177					
Taholah.....	535	45	1,005			9	36	10	92			4	6
Tulalip.....	516	4	56				4	56					
Yakima.....	200	39	125	5	80	17	17		45				
Wisconsin.....	1,017	109	2,995	7	700	67	35	1	1,525				1
Hayward.....	300	67	572			67						(*)	(*)
Keshena.....	4	4	461	4	481				1,425				
Lac du Flambeau.....	210	25	1,199				25	1	100				1
Leona.....	189												
La Pointe.....	175	3	309	3	309								
Red Cliff.....	143	10	434				10		434				
Wyoming: Shoshone.....	200	71	5,980				71		5,980				

1917 reported.

1918 reported.

TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1918.

States and superintendencies.	Indian population.	Num-ber of school age.	Inelig-ible for attend-ance.	Elig-ible for attend-ance.	Indian children enrolled in school.						Capacity all schools.				Total capacity all schools.				
					Government.			Mission and private.			Eligible children not in school.	Government.		Mission and private.					
					Non-reservation boarding.	Day.	Total.	Board-ing.	Day.	Public.		Total in school.	Reper-ation boarding.	Day.					
																Board-ing.	Day.	Public.	Total in school.
Grand total.....	309,755	90,555	4,881	85,674	11,464	10,842	6,215	28,531	4,837	622	429,496	63,476	22,972	19,251	7,515	5,888	1,174	29,496	63,324
Arizona.....	44,499	13,160	1,039	12,121	1,213	1,972	1,680	4,815	618	233	19	5,683	6,486	2,246	1,677	573	235	19	4,762
Camp Verde.....	435	114	4	110	28	57	90	90	.....	.....	.....	90	20	50	60	.....	.....	.....	40
Colorado River.....	1,184	363	7	351	237	84	321	321	.....	.....	.....	321	14	200	132	.....	40	.....	96
Fort Apache.....	2,456	678	7	671	34	117	418	418	42	.....	.....	460	211	200	132	.....	.....	.....	372
Havasupai.....	171	45	.....	45	267	84	351	351	.....	.....	.....	384	11	.....	35	.....	.....	.....	35
Kaibab.....	102	30	.....	30	.....	.....	22	22	.....	.....	.....	24	5	.....	32	.....	.....	.....	23
Leupp.....	1,441	623	15	608	103	.....	120	120	9	.....	.....	129	479	163	.....	20	.....	.....	183
Moeni.....	4,225	1,078	38	1,040	179	437	616	616	.....	.....	.....	616	125	.....	374	.....	.....	.....	499
Navajo.....	12,080	4,580	295	4,285	72	712	841	841	270	47	.....	1,138	3,127	768	85	190	35	.....	1,078
Pima.....	6,263	1,613	33	1,576	247	289	514	514	280	19	.....	1,123	452	218	348	235	35	.....	1,581
Salt River.....	1,277	366	90	306	135	.....	245	245	.....	.....	.....	246	60	.....	158	.....	.....	.....	159
San Carlos.....	2,623	958	95	863	25	225	217	467	35	.....	.....	502	361	216	140	.....	25	.....	381
San Xavier.....	5,237	1,300	47	1,253	180	282	422	422	49	90	2	563	690	280	130	100	.....	.....	522
Truston Canyon.....	4,450	1,137	20	1,117	10	101	111	111	.....	.....	.....	111	6	140	.....	.....	.....	.....	140
Western Navajo.....	6,665	1,200	380	820	14	191	244	244	.....	.....	.....	244	576	338	35	.....	.....	.....	273
Scattered.....	.....	60	.....	60	.....	.....	60	.....	.....	.....	.....	50	.....	.....	.....	.....	.....	.....	.....
California.....	10,725	4,687	213	4,424	980	343	442	1,745	125	.....	1,820	3,000	925	345	665	100	.....	1,820	2,330
Bishop.....	1,593	390	5	385	55	.....	153	.....	.....	.....	.....	269	116	.....	140	.....	.....	.....	256
Campo.....	229	64	25	39	4	.....	16	.....	.....	.....	.....	30	19	.....	30	.....	.....	.....	30
Digger.....	299	81	16	65	30	.....	30	.....	.....	.....	.....	65	35	.....	.....	.....	.....	.....	35
Fort Bidwell.....	750	186	11	174	92	.....	106	.....	.....	.....	.....	118	56	.....	20	.....	.....	.....	12
Fort Yuma.....	835	229	12	217	65	156	12	233	.....	.....	.....	245	72	180	40	.....	.....	.....	32
Greenville.....	693	1,450	14	1,436	65	.....	65	.....	.....	.....	.....	1,386	300	.....	.....	.....	.....	.....	252
Hopps Valley.....	1,485	496	13	483	93	137	230	.....	.....	.....	.....	1,386	300	.....	.....	.....	1,271	.....	269

<sup>1</sup> Includes those in public schools but not reported.

<sup>2</sup> 1917 report.

<sup>3</sup> 1916 report.

<sup>4</sup> Includes Indians from all over northern California.

TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1918—Continued.

States and superintendencies.	Indian population.	Num-ber of school-age.	Inelig-ible for attend-ance.	Elig-ible for attend-ance.	Indian children enrolled in school.						Eligible children not in school.	Capacity all schools.				Total capacity all schools.		
					Government.				Mission and private.			Public.	Total in school.	Government.			Mission and private.	
					Non-reser-vation board-ing.	Reser-vation board-ing.	Day.	Total.	Board-ing.	Day.				Reser-vation board-ing.	Day.		Board-ing.	Day.
California—Continued.																		
Maidu.....	634	151	35	116	19	.....	73	171	1 125	.....	63	207	.....	.....	100	.....	63	163
Pala.....	1,025	233	6	227	98	.....	118	217	(7)	.....	29	200	.....	94	.....	29	127	
Round Valley.....	1,418	455	5	450	99	.....	32	68	(7)	.....	61	353	.....	191	.....	136	277	
Soboba.....	928	267	62	205	36	.....	79	93	.....	.....	60	129	.....	60	.....	61	121	
Tule River.....	443	146	9	137	14	.....	.....	290	.....	.....	86	88	.....	86	.....	.....	86	
Scattered.....	.....	280	.....	280	280	.....	.....	290	.....	.....	.....	280	.....	.....	.....	.....	.....	
Colorado.....	877	310	51	259	20	61	41	122	.....	.....	13	135	124	50	55	.....	13	118
Southern Ute.....	349	108	9	99	6	61	19	86	.....	.....	13	99	.....	50	30	.....	13	93
Ute Mountain.....	508	202	42	160	14	.....	22	36	.....	.....	.....	36	124	25	.....	.....	25	95
Florida: Seminole.....	685	143	.....	143	.....	.....	.....	.....	.....	.....	1	1	142	.....	.....	.....	1	1
Idaho.....	4,144	1,080	262	798	85	278	69	422	140	16	270	948	52	280	80	210	20	880
Coeur d'Alene.....	829	204	33	171	13	.....	47	60	56	.....	31	147	24	.....	80	.....	31	171
Fort Hall.....	1,764	425	100	325	22	155	12	189	22	16	70	297	28	200	20	20	70	340
Fort Lapwai.....	1,551	431	128	302	50	122	.....	173	62	.....	169	404	.....	80	100	.....	169	349
Iowa: Sac and Fox.....	356	119	7	112	17	113	62	192	.....	.....	.....	192	.....	80	70	.....	.....	180
Kansas.....	1,414	522	39	483	98	109	.....	204	.....	.....	183	387	96	71	.....	.....	183	264
Kikapoo.....	637	241	9	232	26	109	.....	145	.....	.....	87	232	.....	71	.....	.....	87	158
Potawatomi.....	777	268	30	238	46	.....	.....	46	.....	.....	96	142	96	.....	.....	.....	96	96
Scattered.....	.....	13	.....	13	13	.....	.....	13	.....	.....	.....	13	.....	.....	.....	.....	.....	.....
Michigan: Mackinac.....	1,067	687	87	600	415	.....	.....	415	213	.....	96	724	.....	.....	353	.....	96	448

	12,003	3,785	378	3,407	479	780	247	1,506	209	949	2,094	738	684	327	200	949	2,180
Minnesota.....																	
Fond du Lac.....	1,067	392	11	381	28	49	39	116	.....	265	372	716	9	74	.....	268	380
Grand Portage.....	1,321	93	44	89	1	51	14	28	.....	57	83	.....	.....	20	.....	57	77
Leech Lake.....	1,786	493	26	468	90	192	.....	282	.....	66	348	120	156	.....	.....	66	223
Nett Lake.....	1,614	207	11	196	8	78	49	135	.....	45	180	16	110	60	.....	45	215
Pipestone (Birch Cooley).....	1,164	44	44	.....	31	.....	.....	31	.....	28	89	.....	.....	.....	.....	28	28
Red Lake.....	1,496	459	17	442	61	199	.....	280	95	8	363	79	108	.....	70	8	246
White Earth.....	6,555	2,045	310	1,735	198	261	145	604	114	509	1,227	508	260	173	130	509	1,063
Scattered.....	52	52	52	52	52	52	52	52	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montana.....	12,079	3,332	305	3,027	384	629	236	1,249	550	646	2,452	645	531	302	830	646	2,379
Blackfeet.....	2,773	867	26	841	104	181	46	331	90	107	528	313	144	60	145	107	458
Crow.....	1,703	407	15	392	22	110	.....	132	61	137	48	378	14	.....	126	170	490
Flathead.....	2,426	732	115	617	101	.....	.....	101	186	197	494	133	.....	.....	300	197	497
Fort Belknap.....	1,208	349	24	325	63	107	34	204	107	12	323	24	51	40	160	197	263
Fort Peck.....	2,039	530	38	492	45	129	67	241	66	161	468	24	120	90	40	161	411
Rocky Boy's Agency.....	1,460	87	16	71	8	71	.....	29	.....	21	29	42	.....	25	.....	21	26
Tongue River.....	1,470	337	71	266	18	81	89	188	40	21	249	17	69	87	60	21	237
Scattered.....	23	23	23	23	23	23	23	23	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebraska.....	2,463	954	51	903	299	.....	.....	299	129	183	629	274	.....	.....	183	25	380
Omaha.....	1,377	463	19	474	158	.....	.....	158	8	115	281	193	.....	.....	.....	115	115
Winnebago.....	1,086	438	32	406	118	.....	.....	118	121	68	325	81	.....	.....	183	25	275
Scattered.....	23	23	23	23	23	23	23	23	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nevada.....	7,954	2,165	193	1,972	365	83	250	698	.....	553	1,261	721	70	294	.....	553	917
Fallon.....	420	76	1	75	26	.....	49	75	.....	.....	75	.....	.....	65	.....	.....	65
Fort McDermitt.....	349	99	8	91	29	59	88	88	.....	3	91	83	.....	80	83	3	83
Mojave River.....	113	29	2	27	6	19	25	25	.....	1	26	1	.....	20	.....	1	21
Nevada.....	561	129	11	118	32	83	.....	115	.....	1	115	3	70	.....	.....	1	70
Walker River.....	804	134	10	124	47	77	.....	76	.....	1	77	47	.....	60	.....	1	61
Western Shoshone.....	607	198	11	187	19	94	.....	113	.....	.....	113	74	.....	69	.....	69	69
Reno, special agent.....	6,100	1,600	150	1,350	206	.....	.....	206	.....	548	754	10,896	.....	.....	.....	548	548
New Mexico.....	21,186	7,353	866	6,487	885	822	1,165	2,872	369	32	19	3,195	698	1,080	375	64	2,236
Jicarilla.....	621	189	31	158	12	97	.....	109	.....	4	113	45	108	.....	.....	4	112
Mescalero.....	630	194	16	178	25	114	.....	139	.....	.....	139	39	100	.....	.....	139	100
Pueblo Bonito.....	2,724	1,250	350	900	21	197	25	243	(11)	.....	243	657	180	30	.....	.....	210
Pueblo day schools.....	8,896	2,416	258	2,153	743	991	1,784	369	6	15	2,123	35	.....	932	375	34	1,366
San Juan.....	6,500	2,700	200	2,500	17	298	.....	315	.....	.....	315	2,158	230	.....	.....	15	1,366
Zuni.....	1,815	557	11	546	20	116	149	285	.....	.....	312	284	80	118	.....	.....	230
Scattered.....	47	47	47	47	47	47	47	47	.....	.....	47	.....	.....	.....	.....	.....	238

\* Includes 20 from Santee, now under Yankton, S. Dak.  
 \* Estimated.  
 \* 70 attend Rahoboth mission boarding, Navajo, Ariz.

\* Attend Vermillion Lake School.  
 \* Includes Cass Lake.  
 \* Attend Crow and Fort Belknap boarding schools.  
 \* Attend St. Augustine mission, Winnebago reservation.

\* Includes Indians from off reservation.  
 \* Attend St. Boniface School, Manki.  
 \* Includes pupils off reservation.  
 \* 1917 report.



TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1918—Continued.

States and superintendences	Indian population.	Num-ber of school-age.	Inelig-ible for attend-ance.	Indian children enrolled in school.						Eligible children not in school.	Capacity all schools.				Total capacity all schools.	
				Government.			Mission and private.		Public.		Government.		Mission and private.			
				Non-reservation board-ing.	Day.	Total.	Board-ing.	Day.			Reser-vation board-ing.	Day.	Board-ing.	Day.		
New York: Scattered.....	5,982	138	.....	138	.....	138	.....	28	166	.....	.....	.....	.....	.....	28	28
North Carolina: Cherokee.....	2,343	916	20	896	33	264	113	410	264	674	222	160	150	.....	264	574
North Dakota.....	8,940	2,947	113	2,834	319	865	363	1,577	263	1,968	866	625	430	154	263	1,461
Fort Berthold.....	1,204	337	25	302	57	107	71	.....	2	180	122	.....	96	88	2	186
Fort Totten.....	1,083	305	11	295	2	249	.....	.....	.....	251	44	323	.....	.....	2	323
Standing Rock.....	3,455	942	18	924	87	530	68	.....	.....	598	326	302	171	66	.....	542
Turtle Mountain.....	3,268	1,306	59	1,247	107	623	.....	.....	250	873	374	160	.....	.....	250	410
Scattered.....	.....	66	.....	66	.....	66	.....	.....	.....	66	.....	.....	.....	.....	.....	.....
Oklahoma.....	116,494	31,212	265	30,947	2,802	1,716	14	4,332	812	25,744	5,234	2,604	65	940	20,400	24,009
Canonment.....	780	238	17	221	26	139	.....	.....	12	151	70	90	.....	.....	12	102
Cheyenne and Arapaho.....	1,262	349	40	319	30	233	.....	.....	.....	285	24	150	.....	.....	50	300
Kiowa.....	4,533	1,595	73	1,512	141	645	.....	.....	403	1,189	323	613	.....	.....	403	1,015
Osage.....	2,186	881	56	825	72	125	19	.....	564	1,194	432	115	75	.....	564	1,754
Ozark.....	524	171	6	165	22	60	.....	.....	62	164	1	80	.....	.....	42	132
Pawnee.....	716	205	3	202	27	59	.....	.....	40	194	16	100	.....	.....	40	160
Ponca.....	1,090	260	11	249	58	103	.....	.....	60	194	16	100	.....	.....	60	160
Sac and Fox.....	4,683	260	20	238	52	68	.....	.....	107	246	98	90	.....	.....	107	247
Sawar.....	747	210	8	202	9	14	.....	.....	107	200	88	.....	.....	.....	107	247
Shawnee.....	1,707	598	21	577	94	129	4	.....	30	151	51	70	65	.....	30	174
Shawnee.....	4,750	248	10	238	39	97	.....	.....	298	536	14	100	.....	.....	298	436
Total.....	14,986	5,083	265	4,818	602	1,716	14	2,332	175	4,289	610	1,537	65	325	1,732	3,649

Oklahoma—Continued. Five Civilized Tribes.....									
101,508	26,977	26,977	2,048	637	18,668	21,353	4,694	1,077	615
41,894	12,788	12,788	466	140	9,552	10,017	2,771	160	18,668
Cherokee Nation.....	3,262	3,262	186	337	2,164	2,827	435	80	9,552
Chickasaw Nation.....	4,777	4,777	684	160	3,729	4,073	204	410	2,164
Choctaw Nation.....	4,705	4,705	537	136	3,080	3,557	1,148	327	3,729
Creek Nation.....	4,445	4,445	186	136	193	379	66	100	3,080
Seminole Nation.....	152	152	152	152	152	152	152	152	3,080
Scattered.....	3,179	3,179	85	587	1,626	2,271	823	305	193
Oregon.....	1,160	3,373	48	183	1,626	2,271	823	305	1,626
Klamath.....	5,900	2,000	16	38	1,500	1,500	142	112	1,500
Roseburg.....	446	128	16	38	64	102	28	50	1,500
Siletz.....	1,220	376	12	126	62	246	118	93	64
Umatilla.....	832	179	9	133	133	133	37	100	62
Warm Springs.....	107	107	107	107	107	107	107	107	130
Scattered.....	22,579	6,448	487	3,376	985	5,180	781	1,620	985
South Dakota.....	2,845	699	71	359	165	534	104	180	165
Cheyenne River.....	2,970	265	25	182	225	225	15	82	165
Crow Creek.....	263	72	3	23	26	49	30	100	26
Flandreau.....	513	170	9	154	7	161	88	210	26
Lower Brule.....	7,340	1,848	164	1,108	194	1,596	210	737	194
Pine Ridge.....	5,521	1,424	80	1,755	196	1,386	8	200	196
Rosebud.....	2,280	675	15	323	149	472	188	133	149
Sisseton.....	3,117	1,106	120	287	249	628	368	115	149
Yankton.....	189	189	189	189	189	189	189	189	249
Scattered.....	1,704	405	25	157	76	233	147	67	76
Utah.....	423	106	7	18	28	38	61	30	28
Gooshute.....	1,162	279	18	137	36	175	86	67	36
Shivwits.....	11,082	3,046	168	1,327	653	2,157	896	311	653
Umatia and Ouray.....	2,566	806	30	133	197	403	274	165	197
Washington.....	2,143	168	15	57	45	11	239	125	45
Colville.....	652	168	10	121	37	158	30	120	37
Cushman.....	604	158	22	126	8	52	54	90	37
Neah Bay.....	734	210	13	74	5	58	139	76	8
Spokane.....	1,333	404	19	326	59	385	180	70	59
Taholah.....	3,000	932	50	166	307	493	389	131	307
Tulalip.....	149	149	149	149	149	149	149	149	493
Yakima.....	149	149	149	149	149	149	149	149	493
Scattered.....	149	149	149	149	149	149	149	149	493

\* Includes 23 pupils from off reservation in addition to those from Fort Totten.  
 \* 1917 report.  
 \* Enrolled at Fort Totten.  
 \* Attend Shawnee school.  
 \* Potawatomi not included.  
 \* Private school.  
 \* Includes Choctaw pupils.  
 \* Includes 30 from Rosebud.  
 \* Includes Santes, formerly listed in Nebraska.  
 \* Does not include 20 under Winnabago.  
 \* Includes pupils of reservation.

TABLE 17.—Indian and school population, number eligible for school attendance, number in schools, etc., and capacity of schools provided for Indian children during fiscal year ended June 30, 1918—Continued.

States and superintendences.	Indian population.	Num-ber of school age.	Inelig-ible for attend-ance.	Elig-ible for attend-ance.	Indian children enrolled in school.						Eligible children not in school.	Capacity all schools.				Total capacity all schools.		
					Government.			Mission and private.				Public.	Total in school.	Government.			Mission and private.	
					Non-reser-vation board-ing.	Day.	Total.	Board-ing.	Day.	Reser-vation board-ing.				Day.	Board-ing.		Day.	
Wisconsin.....	9,696	3,223	206	3,017	705	503	1,318	311	186	475	765	470	206	485	600	2,206		
Grand Rapids.....	1,372	1,382	42	1,340	29	.....	29	.....	.....	138	273	.....	74	.....	.....	38		
Hayward.....	1,276	436	27	409	209	181	20	269	.....	98	367	170	80	220	120	590		
Keshena.....	1,768	597	33	564	60	121	21	282	253	87	42	160	.....	.....	47	207		
Lac du Flambeau.....	1,744	744	215	19	23	142	144	.....	5	47	196	.....	.....	.....	40	730		
Leona.....	355	108	2	106	3	75	45	.....	.....	40	21	.....	.....	200	400	40		
La Pointe.....	1,064	376	75	251	75	154	371	20	65	34	46	.....	.....	.....	50	331		
Oneda.....	2,610	902	4	898	217	154	29	61	33	71	165	140	52	65	71	188		
Red Cliff.....	527	200	4	196	32	.....	57	.....	.....	.....	57	.....	.....	.....	.....	.....		
Scattered.....	.....	57	.....	57	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Wyoming: Shoshone.....	1,696	496	21	475	45	177	243	167	.....	65	475	135	25	240	.....	465		
Alaska.....	.....	302	.....	302	302	.....	302	.....	.....	.....	302	.....	.....	.....	.....	.....		
Illinois.....	.....	3	3	3	3	.....	3	3	.....	.....	3	.....	.....	.....	.....	.....		
Maine.....	.....	2	2	2	2	.....	2	2	.....	.....	2	.....	.....	.....	.....	.....		
Massachusetts.....	.....	2	2	2	2	.....	2	2	.....	.....	2	.....	.....	.....	.....	.....		
Missouri.....	.....	6	6	6	6	.....	6	6	.....	.....	6	.....	.....	.....	.....	.....		
Pennsylvania.....	.....	1	1	1	1	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....		
Porto Rico.....	.....	1	1	1	1	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....		
Texas.....	.....	1	1	1	1	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....		
Total.....	.....	318	.....	318	318	.....	318	.....	.....	.....	318	.....	.....	.....	.....	.....		
Capacity of non-reservation schools.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,499	.....	.....	.....	8,499		

1917 report.

Includes pupils off reservation.

Attend St. Mary's school.

Attend Lac du Flambeau school.

\* Attend Lac du Flambeau school.

\* Attend St. Mary's school.

\* Includes pupils off reservation.

1917 report.

RECAPITULATION.

Indian children of school age.....	90,535
Indian children ineligible for school attendance because of illness, deformity, etc.....	4,881
Total Indian children eligible for school attendance.....	85,674
INDIAN CHILDREN IN SCHOOL.	
Government schools:	
Nonreservation boarding.....	11,464
Reservation boarding.....	10,842
Day.....	6,215
Total Government schools.....	28,521
Mission schools:	
Contract boarding.....	1,886
Noncontract—Boarding.....	2,812
Day.....	622
Total Mission schools.....	3,494
Private schools: Contract boarding.....	5,319
Public schools.....	140
Total private and public schools.....	20,496
Total all classes.....	63,476
Number eligible children not in school.....	22,192

\*The total enrollment of pupils in school is larger than the actual enrollment because it contains the enrollment of pupils off reservations and in hospital—sanatoria who are given some academic instruction and are not included in the eligible for school attendance column in this table.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918.*

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Grand total .....	33,828	33,980	29,064	23,822	
Arizona .....	5,633	5,388	4,904	4,286	
Camp Verde superintendency ..	60	57	52	42	
Camp Verde .....	30	21	19	16	Day.
Clarksdale .....	30	36	33	26	Do.
Colorado River .....	80	84	70	76	Reservation boarding.
Fort Apache superintendency ..	372	426	407	372	
Fort Apache .....	200	267	257	241	Do.
Canon .....	42	38	38	34	Day.
Cibecue .....	50	38	31	28	Do.
East Fork .....	40	41	39	35	Do.
Cibecue .....	20	21	21	17	Mission day; Evangelical Lutheran.
East Fork .....	20	21	21	17	Do.
Fort Mohave .....	200	155	134	117	Nonreservation boarding.
Havasupai .....	35	34	29	26	Day.
Kaibab .....	22	22	18	14	Do.
Leupp superintendency .....	183	112	109	104	
Leupp .....	163	103	100	95	Reservation boarding.
Tolchaco .....	20	9	9	9	Mission boarding; Evangelical Lutheran.
Moqui superintendency .....	499	437	419	278	
Moqui <sup>1</sup> .....	125				Reservation boarding.
Chimopovy .....	50	39	39	18	Day.
Hotsville-Bicabi .....	72	137	129	89	Do.
Orabi .....	80	71	70	49	Do.
Poiseca .....	100	124	115	74	Do.
Second Mesa .....	72	66	66	48	Do.
Navajo superintendency <sup>2</sup> .....	1,076	1,066	971	886	
Navajo .....	360	302	268	257	Reservation boarding.
Chin Lee .....	166	195	162	142	Do.
Tohatchi .....	250	215	196	188	Do.
Cornfields .....	25	30	27	16	Day.
Leki Chuki .....	60	27	22	13	Do.
Ganado .....	35	47	42	38	Mission day; Presbyterian.
Rahoboth .....	40	70	69	63	Mission boarding; Christian Reformed.
St. Michael's .....	150	200	185	169	Mission boarding; Catholic.
Phoenix .....	700	780	714	650	Nonreservation boarding.
Pima superintendency .....	834	876	802	688	
Pima .....	218	289	257	223	Reservation boarding.
Blackwater .....	26	40	37	25	Day.
Casa Blanca .....	40	60	51	36	Do.
Chiu Chuischu .....	40	19	16	10	Do.
Cocklebur .....	40	20	19	5	Do.
Gila Bend .....	30	28	23	15	Do.
Gila Crossing .....	40	22	21	27	Do.
Maricopa .....	40	28	27	25	Do.
Qnaajote .....	40	16	16	9	Do.
Santan .....	40	35	39	25	Do.
St. Ann's (Guadalupe) .....	35	19	16	10	Mission day; Catholic.
St. John's .....	235	290	280	278	Mission boarding; Catholic.
Rice Station .....	216	225	212	197	Reservation boarding.
Salt River superintendency .....	158	110	105	92	
Camp McDowell <sup>1</sup> .....	40				Day.
Salt River .....	88	76	75	68	Do.
Lehi .....	30	34	30	24	Do.

<sup>1</sup> Not in operation.<sup>2</sup> 1917 report.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.*

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
<b>Arizona—Continued.</b>					
San Carlos superintendency.....	165	253	196	162	
San Carlos.....	100	117	95	88	Day.
Bylas.....	40	100	69	51	Do.
Rice.....	25	35	32	23	Mission day; Evangelical Lutheran.
San Xavier superintendency.....	520	401	349	295	
San Xavie.....	155	121	103	92	Day.
Indian Oasis.....	30	32	32	11	Do.
Santa Rosa.....	30	45	27	18	Do.
Tucson.....	35	31	19	13	Do.
Vamori.....	40	33	29	24	Do.
Lourdes.....	30	23	23	23	Mission day; Catholic.
St. Anthony's.....	30	16	16	16	Do.
San Miguel.....	20	22	22	22	Do.
San Salano.....	20	29	29	27	Do.
Tucson.....	120	49	49	49	Mission boarding; Presbyterian.
Truxton Canon.....	140	101	100	94	Reservation boarding.
Western Navajo superintendency.....	373	230	208	193	
Western Navajo.....	308	161	142	130	Do.
Marsh Pass.....	30	30	28	25	Do.
Moencop.....	35	39	38	38	Day.
California.....	1,948	2,034	1,725	1,321	
Bishop superintendency.....	140	98	80	65	
Bishop.....	60	43	34	26	Do.
Big Pine.....	30	20	16	15	Do.
Independence.....	20	15	13	11	Do.
Pine Creek.....	30	20	17	13	Do.
Campo.....	30	16	14	13	Do.
Fort Bidwell superintendency.....	118	110	98	82	
Fort Bidwell.....	98	96	90	76	Nonreservation boarding.
Likely.....	20	14	8	6	Day.
Fort Yuma superintendency.....	220	168	167	159	
Fort Yuma.....	180	156	155	149	Reservation boarding.
Cocopah.....	40	12	13	10	Day.
Greenville.....	90	144	110	86	Nonreservation boarding.
Hoopa Valley.....	165	187	138	114	Reservation boarding.
Malki superintendency: St. Boniface. <sup>1</sup>	100	125	125	90	Mission boarding; Catholic.
Pala superintendency.....	98	73	66	52	
Pala.....	30	27	24	20	Day.
Capitan Grande.....	24	14	11	8	Do.
La Jolla.....	30	20	19	14	Do.
Rincon.....	14	12	12	10	Do.
Round Valley superintendency.....	191	118	110	56	
Round Valley.....	80	50	49	24	Do.
Potter Valley.....	16	10	9	6	Do.
Ukiah.....	25	19	16	10	Do.
Yokais.....	40	16	16	6	Do.
Upper Lake.....	30	23	20	10	Do.
Sherman.....	650	884	715	541	Nonreservation boarding
Soboba superintendency.....	60	32	30	26	
Mesa Grande.....	30	14	13	13	Day.
Volcan.....	30	18	17	13	Do.

<sup>1</sup> 1917 report.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.*

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school
<b>California—Continued.</b>					
Tule River superintendency.....	86	79	72	37	Day.
Tule River.....	30	23	20	7	Do.
Auberry.....	32	31	28	17	Do.
Burrough.....	24	25	24	13	Do.
<b>Colorado.....</b>	105	102	91	75	
Southern Ute superintendency..	80	80	72	61	
Southern Ute.....	50	61	54	45	Reservation boarding.
Allen.....	30	19	18	16	Day.
Ute Mountain.....	25	22	19	14	Do.
<b>Idaho.....</b>	590	493	393	288	
Coeur d'Alene superintendency..	140	103	91	67	
Kalispe.....	30	22	21	11	Do.
Kootenai.....	30	25	24	15	Do.
De Smet.....	80	56	46	41	Mission boarding; Catholic.
Fort Hall superintendency.....	270	206	164	119	
Fort Hall.....	200	156	115	88	Reservation boarding.
Skull Valley.....	20	12	11	7	Day.
Good Shepherd.....	30	22	22	16	Mission boarding; Episcopal.
Presbyterian Mission.....	20	16	16	8	Mission day; Presbyterian.
Fort Lapwai superintendency...	180	135	138	102	
Sanatorium and school.....	80	123	89	70	Boarding.
St. Joseph's.....	100	62	49	32	Mission boarding; Catholic.
<b>Iowa.....</b>	150	175	169	150	
Sac and Fox superintendency...	150	175	169	150	
Sanatorium and school.....	80	113	113	110	Boarding.
Fox.....	40	28	24	16	Day.
Mesquakie.....	30	34	32	24	Do.
<b>Kansas.....</b>	771	1,031	865	684	
Haskell.....	700	922	771	595	Nonreservation boarding.
Kickapoo.....	71	109	94	89	Reservation boarding.
<b>Michigan.....</b>	702	583	629	490	
Mackinac superintendency.....	352	213	192	183	
Baraga (Holy Name).....	152	80	66	60	Mission boarding and day; Catholic.
Harbor Springs (Holy Childhood). ..	200	133	124	123	Mission boarding; Catholic.
Mount Pleasant.....	350	369	337	307	Nonreservation boarding.
<b>Minnesota.....</b>	1,423	1,431	1,171	929	
Cass Lake.....	40	63	46	40	Reservation boarding.
Fond du Lac superintendency...	74	39	31	17	
Fond du Lac.....	40	24	19	9	Day.
Normantown.....	34	15	12	8	Do.
Grand Portage.....	20	14	12	10	Do.
Leech Lake.....	116	129	86	65	Reservation boarding.
Nett Lake.....	60	49	43	31	Day.
Pipestone.....	212	195	164	145	Nonreservation boarding.
Red Lake superintendency.....	238	294	256	184	
Red Lake.....	75	107	89	69	Reservation boarding.
Cross Lake.....	93	92	79	58	Do.
St. Mary's.....	70	95	88	57	Contract Mission boarding; Catholic.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.*

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
<b>Minnesota—Continued.</b>					
Vermillion Lake .....	116	123	118	103	Reservation boarding.
White Earth superintendency .....	553	520	415	334	
White Earth .....	250	261	181	137	Do.
Beaulieu .....	30	40	34	28	Day.
Elbow Lake .....	30	12	11	9	Do.
Pine Point .....	53	39	33	25	Do.
Round Lake .....	30	23	17	12	Do.
Twin Lake .....	30	32	31	22	Do.
St. Benedict's .....	130	114	109	101	Contract mission boarding; Catholic.
<b>Montana .....</b>	<b>1,833</b>	<b>1,553</b>	<b>1,304</b>	<b>1,059</b>	
Blackfeet superintendency .....	349	317	226	181	
Blackfeet .....	144	181	128	103	Reservation boarding.
Heart Butte .....	30	21	16	11	Day.
Old Agency Day .....	30	25	22	17	Do.
Holy Family .....	145	90	60	50	Mission boarding; Catholic.
Crow superintendency .....	442	315	201	248	
Crow .....	100	70	63	52	Reservation boarding.
Pryor Creek .....	47	47	46	39	Do.
Black Lodge .....	30	27	27	25	Mission day; American Missionary Society.
Lodge Grass .....	50	31	26	21	Mission day; Baptist.
Reno .....	35	45	45	34	Mission day; American Missionary Society.
St. Ann's .....	25	17	17	15	Mission day; Catholic.
San Xavier .....	125	61	52	50	Mission boarding; Catholic.
Wyola .....	30	17	15	12	Mission day; Baptist.
Flathead superintendency: St. Ignatius .....	300	185	163	145	Mission boarding; Catholic.
Fort Belknap superintendency .....	251	262	213	172	
Fort Belknap .....	51	121	98	83	Reservation boarding.
Lodge Pole .....	40	34	24	13	Day.
St. Paul's .....	100	107	91	76	Mission boarding; Catholic.
Fort Peck superintendency .....	250	262	230	197	
Fort Peck .....	120	129	117	107	Reservation boarding.
No. 1 .....	30	22	19	14	Day.
No. 2 .....	30	27	21	12	Do.
No. 4 .....	30	18	16	13	Do.
Wolf Point .....	40	66	57	51	Mission boarding and day. Presbyterian.
Rocky Boy's .....	25	.....	.....	.....	Day.
Tongue River superintendency .....	216	210	181	116	
Tongue River .....	69	81	72	47	Reservation boarding.
Birney .....	47	46	40	33	Day.
Lame Deer .....	40	43	34	23	Do.
St. Labre's .....	60	40	35	23	Contract mission boarding; Catholic.
<b>Nebraska .....</b>	<b>607</b>	<b>615</b>	<b>520</b>	<b>386</b>	
Genoa .....	400	488	393	280	Nonreservation boarding.
Winnebago superintendency .....	207	127	127	106	
Winnebago Mission .....	60	60	60	57	Mission boarding; Dutch Reformed.
St. Augustine .....	122	49	49	37	Mission boarding; Catholic.
All Saints .....	25	18	18	12	Mission day; Episcopal.
<b>Nevada .....</b>	<b>700</b>	<b>741</b>	<b>604</b>	<b>496</b>	
Carson .....	336	408	337	267	Nonreservation boarding.
Fallon superintendency .....	65	49	39	33	
Fallon .....	40	30	23	20	Day.
Lovelocks .....	25	19	16	13	Do.

<sup>1</sup> Not in operation.



TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.*

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
<b>Nevada—Continued.</b>					
Fort McDermitt.....	80	59	42	35	Day.
Mosope River.....	20	19	17	16	Do.
Nevada.....	70	83	65	58	Reservation boarding.
Walker River.....	60	29	24	19	Day.
Western Shoshone superintendency.	69	94	80	68	
Western Shoshone No. 1.....	35	40	34	27	Do.
Western Shoshone No. 2.....	34	54	46	41	Do.
<b>New Mexico.....</b>	<b>2,967</b>	<b>3,268</b>	<b>2,906</b>	<b>2,609</b>	
Albuquerque.....	400	470	447	387	Nonreservation boarding.
Jicarilla.....	108	97	92	89	Reservation boarding.
Mescalero.....	100	114	113	110	Do.
Pueblo Bonito superintendency..	210	222	177	148	
Pueblo Bonito.....	180	197	156	132	Do.
Pinedale.....	30	25	21	16	Day.
Pueblo day superintendency.....	1,341	1,365	1,242	1,010	
Albuquerque—					
Acomita.....	32	26	23	19	Do.
Encinal.....	30	25	22	17	Do.
Isleta.....	120	126	112	98	Do.
Laguna.....	34	53	47	40	Do.
McCarty's.....	38	34	27	20	Do.
Mesita.....	38	34	30	24	Do.
Paguate.....	60	76	72	63	Do.
Paraje.....	20	39	35	29	Do.
San Felipe.....	60	63	60	47	Do.
Seama.....	28	40	35	30	Do.
Bernalillo.....	125	104	98	92	Mission boarding; Catholic.
<b>Santa Fe—</b>					
Cochiti.....	28	31	26	24	Day.
Jemez.....	120	110	92	69	Do.
Picuris.....	24	22	22	21	Do.
San Ildefonso.....	40	19	18	15	Do.
San Juan.....	70	59	50	44	Do.
Santa Clara.....	40	65	56	44	Do.
Santa Domingo.....	50	80	68	64	Do.
Sis.....	30	16	16	13	Do.
Taos.....	70	72	63	38	Do.
Jemez.....	34	5	5	4	Mission day.
St. Catherine's.....	250	265	265	200	Mission boarding; Catholic.
<b>San Juan superintendency.....</b>	<b>230</b>	<b>298</b>	<b>249</b>	<b>232</b>	
San Juan.....	150	214	178	167	Reservation boarding.
Toedlena.....	80	84	71	65	Do.
<b>Santa Fe.....</b>	<b>350</b>	<b>410</b>	<b>386</b>	<b>351</b>	Nonreservation boarding.
<b>Zuni superintendency.....</b>	<b>228</b>	<b>292</b>	<b>290</b>	<b>282</b>	
Zuni.....	80	116	115	114	Reservation boarding.
Zuni.....	118	149	148	143	Day.
Christian Reformed.....	30	27	27	25	Mission day; Christian Reformed.
<b>North Carolina.....</b>	<b>310</b>	<b>377</b>	<b>319</b>	<b>236</b>	
<b>Cherokee superintendency.....</b>	<b>310</b>	<b>377</b>	<b>319</b>	<b>236</b>	
Cherokee.....	160	264	234	195	Reservation boarding.
Big Cove.....	40	30	20	9	Day.
Birdtown.....	40	40	29	14	Do.
Little Snowbird.....	30	22	17	8	Do.
Snowbird Gap.....	40	21	19	10	Do.
<b>North Dakota.....</b>	<b>1,489</b>	<b>1,749</b>	<b>1,353</b>	<b>1,019</b>	
Bismarck <sup>1</sup> .....	80	114	104	44	Nonreservation boarding.

<sup>1</sup> Closed temporarily.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.*

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
<b>North Dakota—Continued.</b>					
Fort Berthold superintendency..	184	121	114	96	
No. 1.....	30	10	8	6	Day.
No. 2.....	36	19	16	13	Do.
No. 3.....	30	21	19	16	Do.
Fort Berthold.....	75	43	43	36	Mission boarding; Catholic.
Congregational.....	13	28	28	25	Mission boarding; Congregational.
Fort Totten.....	323	536	346	282	Reservation boarding.
Standing Rock superintendency.	542	511	444	379	
Standing Rock.....	202	245	212	182	Do.
Martin Kenel.....	100	84	78	70	Do.
Bullhead.....	40	38	28	24	Day.
Cannon Ball.....	40	33	26	15	Do.
Grand River.....	30	15	14	12	Do.
Little Oak Creek.....	40	23	18	13	Do.
Porcupine.....	24	5	5	4	Do.
St. Elizabeth's.....	50	55	50	48	Mission boarding; Episcopal.
Standing Rock Mission <sup>1</sup> .....	16	13	13	11	Mission boarding.
Turtle Mountain superintendency.....	160	229	163	92	
No. 1.....	40	44	34	22	Day.
No. 2.....	30	49	33	17	Do.
No. 3.....	30	59	41	20	Do.
No. 4.....	30	51	37	22	Do.
No. 5.....	30	26	18	11	Do.
Wahpeton.....	200	238	182	126	Nonreservation boarding.
<b>Oklahoma.</b>					
	4,109	4,536	3,877	3,431	
Cantonment.....	90	111	100	87	Reservation boarding.
Cheyenne and Arapaho.....	150	205	167	153	Do.
Chilocco.....	500	664	596	528	Nonreservation boarding.
Kiowa superintendency.....	613	645	615	543	
Anadarko.....	110	140	153	120	Reservation boarding.
Fort Sill.....	160	181	172	163	Do.
Rainy Mountain.....	155	168	142	126	Do.
Riverside.....	188	161	148	134	Do.
Osage superintendency.....	190	147	124	97	
Osage.....	115	128	109	86	Do.
St. Louis's.....	75	19	15	11	Contract Mission boarding; Catholic.
Otoe.....	80	90	83	79	Reservation boarding.
Pawnee.....	100	59	55	52	Do.
Ponca.....	90	103	90	77	Do.
Seger superintendency.....	144	112	110	99	
Seger.....	79	98	96	88	Do.
Red Moon.....	65	14	14	11	Day.
Seneca superintendency.....	150	183	162	148	
Seneca.....	100	139	120	110	Do.
St. Mary's.....	50	44	42	38	Contract Mission boarding; Catholic.
Shawnee superintendency.....	310	250	202	177	
Shawnee.....	110	138	111	91	Reservation boarding.
Sacred Heart (St. Benedict's).....	100	50	34	30	Mission boarding; Catholic.
Sacred Heart (St. Mary's)....	100	62	57	56	Do.
Total, Western Oklahoma.	2,417	2,559	2,304	2,040	

<sup>1</sup> 1917 report.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.*

Superintendencies and names of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
Oklahoma—Continued.					
Five Civilized Tribes.....	1,092	1,977	1,573	1,391	
Cherokee Nation: Cherokee Orphan School.	100	174	148	131	Tribal boarding.
Creek Nation.....	327	392	336	304	
Euchee.....	100	130	115	106	Do.
Eufaula.....	112	136	115	106	Do.
Nuyaka.....	115	126	106	90	Do.
Chickasaw Nation.....	115	160	114	95	
Bloomfield.....	80	116	80	67	Do.
El Meta Bond College....	85	44	84	28	Contract; private boarding
Choctaw Nation.....	530	653	528	473	
Armstrong Male Academy.	100	129	96	81	Tribal boarding.
Jones Male Academy....	100	123	99	86	Do.
Tuskahoma Academy....	110	123	105	99	Do.
Wheelock Academy.....	100	118	99	89	Do.
Old Goodland.....	80	101	81	72	Contract mission boarding; Presbyterian.
St. Agnes Mission.....	40	59	48	46	Contract mission boarding; Catholic
Chickasaw and Choctaw Nation.	400	433	327	291	
Murray School of Agriculture.	150	96	53	49	Contract private boarding.
Oklahoma Presbyterian College.	50	54	43	36	Contract mission boarding; Presbyterian.
St. Agnes Academy.....	160	192	148	126	Contract mission boarding; Catholic.
St. Elizabeth's.....	70	68	62	60	Do.
St. Joseph's.....	30	23	21	20	Do.
Seminole Nation: Mekuskey	100	165	120	97	Tribal boarding.
Oregon.....	1,275	1,218	1,024	773	
Klamath superintendency.....	202	159	139	77	
Klamath.....	112	109	93	54	Reservation boarding.
Modoc Point.....	30	18	16	7	Day.
No. 2.....	30	13	12	6	Do.
No. 3.....	30	19	18	10	Do.
Salem.....	650	758	633	492	Nonreservation boarding.
Siletz.....	50	16	10	7	Day.
Umatilla superintendency.....	243	160	129	106	
Umatilla.....	93	102	72	59	Reservation boarding.
St. Andrew's (Kate Drexel).	150	58	57	47	Mission boarding; Catholic.
Warm Springs superintendency..	130	125	113	91	
Warm Springs.....	100	106	96	80	Reservation boarding.
Simnasho.....	30	19	15	11	Day.
Pennsylvania: Carlisle.....	757	789	689	607	Nonreservation boarding.
South Dakota.....	4,028	4,128	3,421	2,686	
Cheyenne River superintendency	200	213	172	141	
Cheyenne River.....	180	191	153	127	Reservation boarding.
No. 3.....	20	22	19	14	Day.
Crow Creek superintendency....	157	155	121	96	
Crow Creek.....	82	112	80	63	Reservation boarding.
Immaculate Conception.....	75	48	41	33	Contract mission boarding; Catholic.
Flandreau.....	360	406	333	238	Nonreservation boarding.
Lower Brule.....	100	105	79	70	Reservation boarding.
Pierre.....	250	274	236	195	Nonreservation boarding.

TABLE 18.—Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
<b>South Dakota—Continued.</b>					
Pine Ridge superintendency.....	1,187	1,160	914	681	
Pine Ridge.....	210	321	249	183	Reservation boarding.
No. 1.....	26	28	18	15	Day.
No. 4.....	30	16	13	11	Do.
No. 5.....	30	38	35	26	Do.
No. 6.....	30	27	20	12	Do.
No. 7.....	33	28	24	15	Do.
No. 9.....	30	29	22	15	Do.
No. 10.....	33	21	16	11	Do.
No. 12.....	30	16	11	6	Do.
No. 13.....	24	15	13	7	Do.
No. 14.....	22	22	18	9	Do.
No. 15.....	24	25	17	14	Do.
No. 16.....	36	32	24	11	Do.
No. 17.....	30	24	21	16	Do.
No. 18.....	33	21	17	13	Do.
No. 19.....	30	26	18	11	Do.
No. 20.....	24	19	16	11	Do.
No. 21.....	30	23	18	12	Do.
No. 22.....	27	16	10	7	Do.
No. 23.....	30	14	10	7	Do.
No. 24.....	33	25	19	12	Do.
No. 25.....	30	8	6	5	Do.
No. 26.....	30	24	19	12	Do.
No. 27.....	20	16	14	9	Do.
No. 28.....	22	15	13	10	Do.
No. 29.....	30	14	12	9	Do.
No. 30.....	20	18	13	6	Do.
Holy Rosary.....	240	269	228	206	Contract Mission boarding; Catholic.
Rapid City.....	300	344	277	200	Nonreservation boarding.
Rosebud superintendency.....	1,001	975	864	715	
Rosebud.....	200	268	244	213	Reservation boarding.
Blackpipe.....	20	31	20	13	Day.
Corn Creek.....	40	27	17	12	Do.
Cut Meat.....	24	22	17	13	Do.
He-Dog's-Camp.....	27	23	20	19	Do.
Ironwood.....	24	12	11	9	Do.
Little Crow's Camp.....	26	14	14	12	Do.
Milk's Camp.....	29	20	17	13	Do.
Oak Creek.....	26	22	20	15	Do.
Pine Creek.....	25	25	21	16	Do.
Red Leaf.....	25	8	7	6	Do.
Rosebud.....	25	9	8	7	Do.
Spring Creek.....	26	17	16	14	Do.
Upper Cut Meat.....	21	10	9	8	Do.
Whirlwind Soldier.....	26	19	14	10	Do.
White Lake.....	19	14	14	11	Do.
Wood.....	25	13	17	15	Do.
St. Mary's.....	70	56	53	46	Mission boarding; Episcopal.
St. Francis's.....	325	360	325	263	Contract Mission boarding; Catholic.
Sisseton's superintendency.....	173	185	157	134	
Sisseton.....	133	165	140	121	Reservation boarding.
Sisseton Day.....	40	20	17	13	Day.
Springfield.....	60	69	64	58	Nonreservation boarding.
Yankton superintendency.....	240	252	204	158	
Yankton.....	115	140	116	76	Reservation boarding.
Santee Normal Training.....	126	112	88	82	Mission boarding and day; Congregational.
Utah.....	137	123	103	66	
Goshute.....	30	.....	.....	.....	Day.
Shivwits.....	40	18	18	13	Do.
Uintah.....	67	108	85	53	Reservation boarding.
Washington.....	1,567	1,573	1,211	944	
Colville superintendency.....	355	234	196	155	
No. 1.....	25	12	10	7	Day.
No. 3.....	30	46	33	26	Do.
No. 4.....	30	34	23	17	Do.
No. 5.....	30	17	14	9	Do.
No. 6.....	25	7	4	4	Do.
No. 9.....	26	17	16	14	Do.
Sacred Heart.....	90	39	39	22	Mission boarding; Catholic.
St. Mary's.....	100	62	57	56	Do.

<sup>1</sup> Not in operation.

TABLE 18.—*Location, capacity, enrollment, and attendance, etc., of schools during fiscal year ended June 30, 1918—Continued.*

Superintendencies and name of schools.	Capacity.	Total enrollment.	Average enrollment.	Average attendance.	Class of school.
<b>Washington—Continued.</b>					
Cushman superintendency.....	545	690	523	376	
Cushman.....	350	557	409	279	Nonreservation boarding.
Chehalis <sup>1</sup> .....	30				Day.
Jamestown.....	30	18	14	13	Do.
Port Gamble.....	25	19	13	10	Do.
Skokomish.....	40	20	20	16	Do.
St. George's.....	70	76	67	58	Mission boarding; Catholic.
<b>Neah Bay superintendency.....</b>	120	102	90	49	
Neah Bay.....	60	62	54	20	Day.
Quileute.....	60	40	36	29	Do.
<b>Spokane superintendency.....</b>	90	51	48	22	
No. 1.....	33	16	15	10	Do.
No. 2.....	32	25	25	9	Do.
No. 8.....	25	10	8	3	Do.
<b>Taholah superintendency.....</b>	76	46	41	32	
Taholah.....	36	41	36	29	Do.
Queets River.....	40	5	5	3	Do.
<b>Tulalip superintendency.....</b>	250	309	234	169	
Tulalip.....	180	262	195	145	Reservation boarding.
Lummi.....	40	28	22	10	Day.
Swinomish.....	30	19	17	14	Do.
<b>Yakima.....</b>	131	141	79	41	Reservation boarding.
<b>Wisconsin.....</b>	2,327	1,710	1,499	1,243	
<b>Hayward's superintendency.....</b>	306	358	277	212	
Hayward.....	221	298	224	170	Nonreservation boarding.
La Courte Oreille.....	74	60	53	42	Day.
<b>Keshena superintendency.....</b>	590	542	485	396	
Keshena.....	170	181	144	102	Reservation boarding.
Neopit.....	80	21	15	11	Day.
St. Joseph's.....	220	253	239	215	Contract Mission boarding.
St. Anthony's.....	120	87	87	68	Catholic.
Lac du Flambeau.....	160	168	150	131	Mission day; Catholic.
<b>La Pointe superintendency.....</b>	690	90	90	75	Reservation boarding.
Odanah Mission.....	490	65	65	50	Mission day; Catholic.
St. Mary's.....	200	25	25	25	Mission boarding; Catholic.
<b>Oneida superintendency.....</b>	190	188	181	170	
Oneida.....	140	154	147	136	Reservation boarding.
Adventist Mission.....	25	18	18	18	Mission day; Adventist.
Hobart Mission.....	25	16	16	16	Mission day; Episcopal.
<b>Red Cliff superintendency.....</b>	117	62	59	53	
Red Cliff.....	52	29	26	20	Day.
Bayfield (Holy Family).....	65	33	33	33	Mission boarding; Catholic.
<b>Tomah.....</b>	275	302	267	206	Nonreservation boarding.
<b>Wyoming.....</b>	400	365	297	244	
<b>Shoshone superintendency.....</b>	400	365	297	244	
Shoshone.....	135	177	111	77	Reservation boarding.
Arapaho.....	25	21	21	15	Day.
St. Stephen's.....	120	77	75	66	Contract Mission boarding.
Shoshone Mission.....	20	16	16	15	Catholic.
St. Michael's.....	100	74	74	71	Mission boarding; Episcopal.
					Contract Mission boarding.
					Protestant Episcopal.

<sup>1</sup> Not in operation.

TABLE 19.—*School statistics for 42 years.*<sup>1</sup>

INDIAN SCHOOLS AND AVERAGE ATTENDANCE FROM 1877 TO 1918.

Year.	Boarding schools.		Day schools. <sup>2</sup>		Total.	
	Number.	Average attendance.	Number.	Average attendance.	Number.	Average attendance.
1877.....	48	.....	102	.....	150	3,598
1878.....	49	.....	119	.....	168	4, 43
1879.....	52	.....	107	.....	159	4,448
1880.....	60	.....	109	.....	169	4,661
1885.....	114	6,201	86	1,942	200	8,143
1890.....	40	9,865	106	2,367	246	12,232
1895.....	157	15,061	125	1,127	282	18,188
1900.....	153	17,708	154	3,860	307	21,568
1905.....	167	21,812	145	3,643	312	25,455
1910.....	158	20,106	227	4,899	385	24,946
1911.....	156	18,774	227	4,873	383	23,647
1912.....	<sup>3</sup> 170	20,973	242	5,308	412	26,281
1913.....	<sup>4</sup> 168	20,607	230	5,223	398	25,830
1914.....	<sup>5</sup> 166	20,868	233	5,269	399	26,137
1915.....	<sup>6</sup> 160	20,702	228	5,426	388	26,128
1916.....	<sup>7</sup> 162	<sup>8</sup> 20,083	238	5,220	400	<sup>9</sup> 25,308
1917.....	<sup>10</sup> 160	<sup>11</sup> 20,368	234	4,925	394	<sup>12</sup> 25,294
1918.....	<sup>13</sup> 161	<sup>14</sup> 19,396	223	4,427	384	<sup>15</sup> 23,822

<sup>1</sup>For other years' see 1913 report.

<sup>2</sup>Indian children in public schools under contract are included in the average attendance, but the schools are not included in the number of schools.

<sup>3</sup>Includes Five Tribes, boarding schools.

<sup>4</sup>The decrease in attendance is due to a different method of computation. Formerly the average attendance was the average of three-quarters having the greatest attendance. The year's attendance has been computed for 10 months, including September, when the attendance is always small.

APPROPRIATIONS MADE FOR SCHOOLS BY THE GOVERNMENT SINCE 1876.

Year.	Appropriation.	Per cent increase.	Year.	Appropriation.	Per cent increase.
1877.....	\$20,000	.....	1900.....	2,936,060	11.28
1878.....	30,000	50.00	1901.....	3,080,367	4.91
1879.....	60,000	100.00	1902.....	3,244,280	5.32
1880.....	75,000	25.00	1903.....	3,531,280	8.94
1881.....	75,000	.....	1904.....	3,522,960	<sup>1</sup> .23
1882.....	135,000	80.00	1905.....	3,880,740	10.15
1883.....	487,200	260.00	1906.....	3,777,100	<sup>2</sup> 2.67
1884.....	675,200	38.00	1907.....	3,925,890	3.93
1885.....	992,800	47.00	1908.....	4,105,715	4.58
1886.....	1,100,066	10.00	1909.....	4,008,825	<sup>3</sup> 2.36
1887.....	1,211,415	10.00	1910.....	3,757,009	<sup>4</sup> 6.26
1888.....	1,179,916	<sup>5</sup> 2.60	1911.....	3,685,290	<sup>6</sup> 1.93
1889.....	1,348,015	14.00	1912.....	3,757,495	1.96
1890.....	1,364,568	1.00	1913.....	4,015,720	6.87
1891.....	1,842,770	35.00	1914.....	<sup>7</sup> 4,403,355	9.65
1892.....	2,291,650	24.30	1915.....	<sup>8</sup> 4,678,627	6.25
1893.....	2,315,612	1.04	1916.....	<sup>9</sup> 4,391,155	6.14
1894.....	2,243,497	<sup>10</sup> 3.5	1917.....	<sup>11</sup> 4,701,003	7.08
1895.....	2,060,695	<sup>12</sup> 8.87	1918.....	<sup>13</sup> 5,185,290	10.28
1896.....	2,056,515	<sup>14</sup> 2.00	1919.....	<sup>15</sup> 4,835,300	<sup>16</sup> 6.75
1897.....	2,517,265	22.45			
1898.....	2,631,771	4.64			
1899.....	2,638,390	.25			
			Total since 1876.....	108,777,495	.....

<sup>1</sup>Decrease.

<sup>2</sup>Includes \$400,000 for Indian school and agency buildings.

<sup>3</sup>Includes \$440,000 for Indian school and agency buildings.

<sup>4</sup>Includes \$450,000 for Indian school and agency buildings.

<sup>5</sup>Includes \$300,000 for Indian school buildings, Sioux Reservations, North and South Dakota.

<sup>6</sup>Includes \$360,000 for Indian school and agency buildings.

TABLE 20.—*Demonstration farms, fiscal year ended June 30, 1918.*

States and superintendencies.	Acreage.	Value.	Value of tools and implements.	Employees engaged.		Value of products.			
				Number.	Wages.	Raised.	Consumed.	Sold.	On hand.
Grand total.....	1,532	\$51,674	\$5,496	37	\$4,832	\$9,226	\$1,192	7,600	434
Arizona.....	140	5,450	2,341	11	212	35	35	.....	.....
Kaibab.....	90	450	252	11	212	35	35	.....	.....
Pima <sup>1</sup> .....	50	5,000	2,089	.....	.....	8,770	736	7,600	434
California.....	3	120	.....	.....	.....	271	271	.....	.....
Campo.....	3	120	.....	.....	.....	271	271	.....	.....
Maliki <sup>2</sup> .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho: Fort Hall <sup>3</sup> .....	200	3,270	.....	.....	.....	.....	.....	.....	.....
Montana: Blackfeet <sup>3</sup> .....	48	1,200	25	.....	.....	.....	.....	.....	.....
New Mexico: Pueblo day schools.....	47	418	( <sup>4</sup> )	1	150	.....	.....	.....	.....
North Dakota: Fort Berthold <sup>3</sup> .....	638	7,656	825	13	3,320	.....	.....	.....	.....
Oklahoma: Cheyenne and Arapaho.....	410	32,800	.....	.....	.....	.....	.....	.....	.....
Oregon: Klamath.....	40	400	2,305	2	1,000	150	150	.....	.....
Utah: Shivwits.....	6	360	.....	10	150	.....	.....	.....	.....
Wyoming: Shoshone <sup>3</sup> .....	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Former report.<sup>2</sup> Not reported.<sup>3</sup> Only items reported.<sup>4</sup> Agency tools used.TABLE 21.—*Experimentation farms, fiscal year ended June 30, 1918.*

States and superintendencies.	Acreage.	Value.	Value of tools and implements.	Employees engaged.		Value of products.			
				Number.	Wages.	Raised.	Consumed.	Sold.	On hand.
Grand total.....	12	\$1,575	.....	4	\$25	.....	.....	.....	.....
Montana: Crow.....	1	50	.....	4	25	.....	.....	.....	.....
New Mexico: San Juan <sup>1</sup> .....	10	1,500	.....	.....	.....	.....	.....	.....	.....
North Dakota: Standing Rock <sup>1</sup> .....	1	25	.....	.....	.....	( <sup>2</sup> )	.....	.....	.....

<sup>1</sup> Only items reported.<sup>2</sup> Crop failure.

TABLE 22.—Suppression of liquor traffic among Indians, fiscal year ended June 30, 1918.

States.	Paid depen- ties em- ployed.	Cases pend- ing July 1, 1917.	New cases fiscal year 1918.	Total cases 1918.	Disposition of cases.					Fined and imprisoned.					Seizure of liquors (gallons).				
					Convic- tions.	Disem- bale.	Acquit- tals.	Died, es- caped, or bonds for- feited.	Total cases dis- posed of.	Cases pend- ing June 30, 1918.	Num- ber.	Fines. (mos.).	Term (mos.).	Whisky hol.	Alco- hol.	Malt.	Wine.	Mis- cella- neous.	Total.
Total, 1918.....	51	3,070	2,100	5,179	993	451	48	130	1,522	3,657	993	\$120,007	2,774	8,665	343	12,709	13,293	1,564	38,564
1917.....	46	2,389	2,371	4,760	966	568	86	51	1,661	3,079	966	84,763	3,163	5,068	492	7,571	3,486	1,967	19,539
1916.....	29	2,189	1,619	3,748	906	410	64	29	1,409	2,369	906	58,762	2,603	5,807	511	9,973	3,966	1,182	21,522
1915.....	38	1,621	2,187	3,808	1,237	317	73	22	1,649	2,159	1,196	102,067	3,662	2,468	186	15,568	2,087	2,252	33,947
1914.....	58	1,865	1,705	3,070	864	449	94	22	1,449	1,621	865	103,304	3,662	2,468	480	14,419	287	9,564	26,580
1913.....	67	1,004	1,064	2,068	553	114	17	9	1,063	1,366	553	80,281	3,069	7,214	472	17,181	826	487	31,962
1912.....	194	846	1,480	2,326	1,022	267	32	21	1,322	1,004	1,022	87,627	3,069	6,357	314	23,314	477	621	31,962
1911.....	143	596	1,717	2,313	1,198	296	34	80	1,547	1,706	1,085	80,463	3,260	18,486	1,470	7,773	2,506	5,300	30,944
1900.....			7,403		1,118	18	3			345									
Arizona.....	1	53	29	82	12	3			15	67	12	720	16	29			3	389	421
Arkansas.....	1	10	34	44	13	1			14	30	13	1,700		104					108
California.....	3	49	62	111	64	6	5	1	66	45	54	2,360	131	41	2	111	16		170
Colorado.....	2	8	5	13	4				4	9	4	201	7	8					8
Florida.....																			
Idaho.....	1	72	18	90	3	1	1	1		84	3	300	15	8				1	9
Iowa.....	24	24	39	63	1				1	37	1	100	2	1					1
Kansas.....	8	377	475	852	203	199	14	6	422	430	203	17,040	550	57	3		1	61	15,164
Minnesota.....	2	41	10	51	4	4			8	26	16	2,350	29	16					16
Missouri.....	1	198	161	359	74	42	5	5	126	233	74	6,325	142	16					2
Montana.....		129	25	154	5	16	6		10	144	5	900	22						15
Nebraska.....		44	111	155	81	16			102	53	81	8,450	281	2					2
Nevada.....		2	110	272	72	25	1	2	100	172	72	7,350	199	3		7	5		15
New Mexico.....		37	3	40	2				2	38	2	1,000	34						
New York.....																			
North Carolina.....		30	6																
North Dakota.....		3	1	4					4	27	4	450	12						
Oregon.....	21	1,316	642	1,958	292	106	11	10	419	1,539	292	43,217	874	4,516	266	11,743	956	308	17,789
Oklahoma.....	2	21	47	68	35	1	1	3	40	28	35	5,045	34	132		16	213	2	362
Pennsylvania.....		3	3	3															
South Dakota.....	1	71	14	85	6	13	2		21	64	6	375	7	22	8	28			68
Tennessee.....			6						1	5	1	1,000							29
Texas.....		8	27	35	8	1			9	26	8	10,200	96	2,173	19	82	1	53	2,328
Utah.....																			
Washington.....	4	23	35	58															
Wisconsin.....	1	422	167	589	17	23	2	1	103	486	17	1,490	27						13
Wyoming.....		11	13	24	9	2			11	13	9	900	18	13					

<sup>1</sup> Includes 6 deaths and 3 escaped. <sup>2</sup> Includes fined but not sentenced, penitentiary sentences, and miscellaneous. <sup>3</sup> Includes 75 suspended. <sup>4</sup> Cases prosecuted.



TABLE 23.—Estimated area, stand, and value of timber, sawmills, and quantity and value of timber cut on reservations, fiscal year ended June 30, 1918.

States and reservations.	Allotted lands.			Unallotted lands.			Sawmills on reservations.				Timber cut by—			
	Acreage.	Quantity.	Total stumpage value.	Acreage.	Quantity.	Total stumpage value.	Private.		Government.	Cost.	Quantity.	Value.	Quantity.	Value.
							Num-ber.	Cost.			Quan-tity.		Quan-tity.	
		<i>M board feet</i>			<i>M board feet</i>						<i>M board feet</i>		<i>M board feet</i>	
Grand total.....	1,287,421	6,426,215	\$11,044,615	5,275,554	32,270,265	\$73,020,168	38	\$228,647	35	\$179,057	31,018	\$451,547	41,068	\$183,826
Arizona.....	2,560	3,925	4,000	1,242,740	4,286,600	11,260,050	1	7,800	3	15,000	6,466	12,972	14,455	61,528
Fort Apache.....				680,000	1,000,000	3,000,000	1	7,800	1	10,080	6,042	11,802	60	578
Navajo.....				430,000	3,000,000	7,500,000					200	500	600	2,000
Pima.....				20,000	40,000	80,000	1		1	2,000			3,028	31,000
Salt River.....													323	6,750
San Carlos.....				111,000	221,000	603,250			1	3,000	224	670	1,000	14,000
San Xavier.....	2,560	3,925	4,000										9,416	6,900
Truxton Canon.....				31,740	25,600	76,800								
California.....	23,450	1,260,166	1,915,250	109,550	1,073,708	938,356			1	1,500	238	1,986	448	562
Campo.....				50	50	200								
Digger.....	50	166	250								15	50	25	150
Fort Bidwell.....	4,000	10,000	40,000	1,200	5,000	25,000			1	1,800	200	1,800		
Fort Yuma.....				500	5,000	4,000								
Hopona Valley.....	16,400	1,300,000	1,800,000	83,600	860,000	423,000			(1)	(1)	23	46	423	412
Pala.....				200	200	1,000								
Round Valley.....	3,000	50,000	75,000						1	1,500				
Soboba.....				4,000	20,556	77,156								
Tule River.....				20,000	182,000	456,000								
Colorado: Southern Ute.....	1,900	2,000	4,000											
Idaho.....	20,960	69,880	214,640	75,709	377,887	1,328,661	10	35,000	1	2,000			361	938
Coeur d'Alene.....	19,960	59,880	179,640	2,629	7,887	23,661							200	490
Fort Hall.....				46,060	100,000	490,000								
Fort Lapwai.....	1,000	10,000	35,000	27,000	270,000	845,000	1	2,000					161	448
Iowa: Sac and Fox.....				500	75	1,500					2	24	158	1,320

	14, 677	40, 661	81, 962			990, 178	2		3	7, 800	1, 223	12, 378	391	862	
Michigan: Mackinac	140, 443	30, 000	208, 500	124, 397	100, 653	990, 178	2						2, 573	8, 856	36, 265
Minnesota:															
Fond du Lac	6, 000	1, 500	7, 500	16, 000	3, 000	10, 000	2	( <sup>1</sup> )	1	800			137	1, 008	737
Grand Portage	26, 000	25, 000	25, 000	16, 000	3, 000	10, 000	2						523	2, 026	10, 266
Leech Lake	106, 048	7, 000	35, 000						1	1, 000			1, 051	5, 140	21, 153
Nett Lake	1, 886	14, 000	126, 000	107, 877	96, 558	955, 575			1	6, 000	1, 158	11, 978	587	4, 000	14, 440
Red Lake				230	2, 000	24, 000					28		523	587	4, 000
Vermillion Lake				400	100	600							2, 014	11, 338	48, 735
White Earth	2, 500	2, 500	15, 000										651	874	15
Montana:	32, 213	311, 773	756, 465	357, 070	2, 100, 800	5, 811, 800	10	52, 000	5	10, 000	945	1, 077	100	1, 000	
Blackfeet				44, 270	100, 000	675, 000			1	1, 300			60	200	15
Crow	2, 000	2, 000	2, 000	10, 800	24, 800	24, 800	1	2, 000					580	664	48, 730
Flathead	20, 320	270, 000	675, 000	200, 000	1, 400, 000	4, 200, 000	6	50, 000	1	3, 700	285	601	714	9, 600	
Fort Belknap				32, 000	96, 000	192, 000			2	3, 000					
Fort Peck	9, 583	39, 773	79, 465						1	2, 000	680	476			
Tongue River				70, 000	480, 000	720, 000									
Nevada:	1, 000	2, 000	8, 000	2, 000	3, 000	15, 000							100	1, 000	
Nevada				2, 000	3, 000	15, 000							100	1, 000	
Reno, special agent.	1, 000	2, 000	8, 000												
New Mexico:	254, 327	365, 000	1, 045, 000	594, 113	1, 599, 852	4, 690, 250	1	6, 347	5	8, 650	446	994	5, 068	5, 100	22, 360
Jicarilla				205, 253	10, 000	30, 000	1	6, 347	1	4, 000	216	643	551	515	22, 360
Mesquero				350, 000	1, 500, 000	4, 600, 000			2	2, 000					69, 539
Pueblo day schools.				26, 360	32, 362	77, 720									
San Juan				12, 000	50, 000	64, 000			1	2, 500	200	236			
Zuni				1, 500	7, 500	22, 500			1	150	30	90	4, 547	4, 585	
North Carolina: Cherokee				48, 000	35, 000	192, 000			1	4, 000			683	1, 001	
Oklahoma:	3, 000	9, 000	72, 000	11, 605		71, 718									
Oklahoma				11, 605	( <sup>1</sup> )	71, 718									
Five Civilized Tribes:	3, 000	9, 000	72, 000												
Oregon:	204, 885	2, 064, 200	2, 404, 900	1, 137, 559	12, 969, 650	29, 166, 300	7	55, 000	6	27, 000	1, 268	2, 730	5, 761	15, 371	17, 856
Klamath	18, 000	216, 000	549, 000	773, 000	9, 264, 000	23, 700, 000	2	50, 000	4	18, 000	1, 268	2, 730	5, 236	10, 621	17, 856
Roseburg	180, 000	1, 800, 000	1, 800, 000												56, 813
Siletz	700	19, 000	19, 000	3, 189	195, 000	195, 000	5	5, 000					523	4, 750	
Umatilla	700	4, 200	8, 400	2, 220	10, 650	21, 300									
Warm Springs	5, 455	26, 000	37, 500	360, 000	3, 500, 000	5, 260, 000			2	9, 000					

<sup>1</sup> Not reported.  
<sup>2</sup> Includes land value also.

<sup>3</sup> Unknown.  
<sup>4</sup> Tribal timber.

<sup>5</sup> School reserve.  
<sup>6</sup> Destroyed by fire.

<sup>7</sup> Mostly cordwood, fence posts, etc., on this reservation.  
<sup>8</sup> 1917 report.

TABLE 23.—Estimated area, stand, and value of timber, sawmills, and quantity and value of timber cut on reservations, fiscal year ended June 30, 1918.—Continued.

States and reservations.	Allotted lands.			Unallotted lands.			Sawmills on reservations.				Timber cut by—				Contractors or permittees.	
	Acreage.	Quantity.	Total stumpage value.	Acreage.	Quantity.	Total stumpage value.	Private.		Government.		Government.	Indians.		Quantity.		Value.
							Num-ber.	Cost.	Num-ber.	Cost.		Quan-tity.	Value.			
South Dakota.....	26,800	M board feet. 13,000	59,000	37,236	M board feet. 20,000	100,000	2	1,000	1	2,300	252	M board feet. 2,722	33,910			
Lower Brule.....	1,800	3,000	9,000				2	1,000								
Pine Ridge.....	25,000	10,000	50,000						1	2,300	42					
Utah: Uintah and Ouray.....				6,660	15,500	34,875			1	4,000	419	23	10	151	100	
Washington.....	46,418	2,204,407	4,068,801	1,224,328	7,813,065	11,586,590	4	7,500	6	16,100	1,109	4,822	9,220	35,573	140,628	
Colville.....	180,000	400,000	400,000	620,000	1,002,707	1,002,707	2	(1)	3	10,500	919	1,070	1,415			
Cushman.....	6,391	26,000	48,000									1,300	3,560			
Neah Bay.....	310	4,000	20,797	20,797	275,000	275,000						15	120			
Spokane.....	36,000	261,720	523,440	76,000	1,090,500	1,090,500	2	7,500	2	3,000		710	1,238	397	830	
Taholah.....	54,558	818,377	1,227,568	108,531	4,213,272	6,319,908										
Tulalip.....	24,479	327,810	1,320,465						1	2,600		1,728	2,897	35,176	139,798	
Yakima.....	103,680	326,500	545,130	350,000	1,776,838	2,878,475					190	255				
Wisconsin.....	135,768	49,883	152,297	257,787	1,539,902	6,086,882	1	70,000	1	73,307	18,810	2,038	2,770	57,465	302,204	
Grand Rapids.....																
Hayward.....	9,800	23,000	69,000	13,000	1,300	3,400						88	132	7,886	21,804	
Keshena.....				227,424	1,621,963	5,980,911			1	73,307	18,810	1,970	2,038			
Lac du Flambeau.....	13,021	4,883	29,297	10,594	3,973	23,536										
La Pointe.....	104,967	2,000	14,000	8,769	12,676	88,735	1	70,000						49,629	280,400	
Red Cliff.....	8,000	20,000	40,000													
Wyoming: Shoshone.....				44,160	324,530	756,038			1	7,400	50	50		58	89	

! Not reported.

\* 1917 report.

TABLE 24.—Area on reservations susceptible of irrigation, acreage under projects, and expenditures for irrigation thereon, fiscal year ended June 30, 1918.

State and superintendence.	Area susceptible of irrigation (acres).				Acreage now under project.			Acreage not under project.	Expenditures.			
	Total.	Allotted.	Unallotted.	School and agency.	Unallotted.	Allotted.	Unallotted.	School and agency.	During fiscal year 1918.		To June 30, 1918.	
									Construction.	Maintenance.	Construction.	Maintenance.
Grand total.....	1,005,650	1,150,911	426,463	28,277	718,503	221,754	19,781	645,612	31,684,778.67	4523,579.98	315,006,092.90	32,328,880.75
Arizona.....	183,183	55,930	135,122	2,131	44,923	20,668	1,398	126,204	124,886.07	75,119.52	1,986,433.33	218,042.17
Campo Verde.....	208			208				140			750.49	41.52
Colorado River.....	100,000	11,060	88,330	70	11,600			88,330	19,444.33	34,988.27	268,742.08	70,191.44
Fort Apache.....	2,628		2,325	301	2,325			301			17,383.31	70,983.96
Fort Mojave.....											43,058.91	
Havasupai.....	111		108	3	108			3			2,218.08	
Kalab.....	74		70	4	70			4			5,262.88	
Keams Canyon.....											5,667.30	
Leupp.....	85			85							10,407.73	
Mogul.....	10		10									
Navajo.....	12,248		12,000	248				65	30.56	3,273.10	424,024.76	23,436.96
Papago Reservation and nomadic Papagoes.....									27,437.49	6,589.54		
Pima.....	45,431	32,760	12,210	431	26,250			271	21,230.20	9,342.38	123,422.75	16,285.96
Salt River.....	13,025	8,040	4,926	59	5,573			44	15,682.64	5,313.02	826,211.68	54,218.32
San Carlos.....	2,075		1,963	112	1,485			110	12,529.06		22,714.26	9,705.34
San Xavier.....	3,530	3,500		30	1,600			30	15,120.51		112,478.44	85.29
Truxton Canon.....	185		180	15				10	6,486.81	15,616.21	47,673.62	33,820.00
Western Navajo.....	13,565		13,000	565				85			15,297.88	
California.....	45,938	32,721	12,863	362	10,827	12,359	337	22,413	6,684.57		62,222.77	
Bishop.....	11,368	8,350	8,000	18	1,350			8	17,900.76	35,438.77	727,641.67	126,388.50
Campo.....	257		250	7								
Digger.....	111	86	25		40			7	25.21			
Fort Bidwell.....	5,250	5,150		100	150			100				
Fort Yuma.....	8,350	8,020	160	170	8,020			160	9,064.12	12,432.00		
Hoop Valley.....	2,780	1,400	1,360	29	200			16	4,202.76	3,994.75	727,641.67	126,388.50
Malik.....	13,091	13,081		10	1,571			10	2,964.83	16,853.11		
Pala.....	3,628	1,634	1,980	14	1,067			13	1,241.00			
Round Valley.....	981			13				12	1,842.11	2,032.63		
Soboba.....	161		918	1				1	40.78			
Tule River.....			160		60			100				

Total costs unadjusted for old items prior to 1917 pending inclusion of all irrigation items since 1867.

\* Project abandoned.

\* 1917 report.

TABLE 24.—Area on reservations susceptible of irrigation, acreage under projects, and expenditures for irrigation thereon, etc.—Continued.

State and superintendences.	Area susceptible of irrigation (acres).						Acreage now under project.	Expenditures.					
	Area now under project.							During fiscal year 1918.		To June 30, 1918.			
	Total.	Allotted.	Unal- lotted.	School and agency.	Allotted.	Unal- lotted.		School and agency.	Construc- tion.	Mainte- nance.	Construc- tion.	Mainte- nance.	Total.
Colorado.....	12,830	12,500	.....	330	12,500	.....	330	.....	\$15,185.83	\$5,141.98	\$254,923.92	\$13,368.31	\$268,292.23
Fort Lewis Southern Ute, dimin- ished.....	.....	.....	.....	.....	.....	.....	.....	.....	492.84	223.95	214.24	308.45	522.69
Southern Ute.....	12,830	12,500	.....	330	12,500	.....	330	.....	14,692.99	4,918.03	283,426.35	8,486.16	291,922.51
Idaho.....	46,435	38,940	6,700	795	38,640	6,700	676	419	354.56	37,961.79	895,378.28	251,299.66	1,116,677.94
Fort Hall.....	45,820	38,540	6,700	580	38,540	6,700	580	419	354.56	37,961.79	888,835.32	251,088.22	1,109,943.54
Fort Lapwai.....	615	400	.....	215	100	.....	96	.....	.....	.....	4,156.83	211.44	4,368.25
Lenah.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,366.13	.....	2,366.17
Montana.....	446,842	299,278	134,765	12,799	204,251	113,605	12,129	116,857	1,004,472.88	110,973.43	6,425,568.57	732,494.71	7,158,063.28
Blackfoot.....	111,600	57,086	54,240	164	48,858	35,480	164	27,000	38,323.95	.....	1,023,280.10	23,281.27	1,046,561.37
Crow.....	153,702	153,307	.....	395	74,000	203	203	79,477	52,753.97	75,034.07	1,204,506.02	485,298.51	1,689,774.53
Flathead.....	134,000	81,375	42,125	11,000	81,375	42,125	11,000	400	810,408.60	.....	3,164,268.19	104,358.94	3,268,625.13
Fort Belknap.....	34,020	35,000	.....	1,020	.....	35,000	620	400	5,513.94	33,792.11	257,995.68	83,302.16	343,297.83
Fort Peck.....	7,500	7,500	.....	.....	.....	.....	.....	7,500	99,423.36	.....	642,513.55	14,348.20	656,861.75
Fort Shaw.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,786.31	.....	2,786.31
Tongue River.....	3,620	.....	3,400	220	.....	1,000	140	2,480	20.06	2,147.25	130,225.72	19,957.64	150,183.86
Nevada.....	62,111	11,408	50,872	336	4,113	1,732	231	56,035	31,722.30	13,019.73	377,284.18	50,421.61	427,685.79
Carson School	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fallon (Carson Sink al- lowments).....	3,740	3,690	18	32	950	18	32	2,740	.....	.....	6,548.24	.....	6,548.24
Fort McDermitt.....	1,763	1,158	530	75	608	.....	39	1,116	.....	.....	.....	28,094.68	131,398.71
Moapa River.....	1,400	600	.....	.....	600	.....	.....	.....	8,260.62	3,261.60	5,222.11	407.87	5,629.98
Nevada (Pyramid Lake)	21,000	21,000	.....	30	.....	620	30	20,380	23,431.22	6,496.15	94,999.78	522.70	101,157.06
Walker River.....	6,035	5,955	24	54	1,955	24	30	4,726	24.97	2,898.31	116,245.99	15,648.59	131,892.58
Western Shoshone.....	28,943	.....	28,800	143	.....	1,070	100	27,173	2.49	373.77	45,811.67	4,268.63	49,555.29

New Mexico.													
	90,800	1,850	465	870	465	36,130	740	13,465	53,833.84	11,802.47	900,802.98	89,289.79	1,080,152.77
Juarilla.....	2,210	1,850	465	860	465	280	240	1,505	1,837.37	.....	7,740.15	.....	7,740.15
Mescalero.....	2,000	1,850	465	860	465	280	40	100	235.50	.....	15,698.32	.....	15,698.32
Pueblo Bonito <sup>1</sup> .....	10,000	.....	360	400	.....	280	.....	.....	.....	.....	341.21	.....	341.21
Pueblo day schools.....	26,830	.....	.....	30	.....	22,080	20	4,800	18,109.13	1,204.54	107,491.64	1,707.86	109,199.50
San Juan.....	14,140	.....	13,820	8,820	8,820	5,000	320	5,000	31,200.23	3,408.49	251,911.15	53,911.10	305,822.25
Zuni.....	7,120	.....	7,000	120	.....	5,000	120	2,000	1,981.61	7,089.44	547,671.51	33,670.83	581,342.34
North Dakota: Standing Rock <sup>1</sup> .....													
.....	89,648	88,640	.....	1,006	.....	.....	.....	89,646	.....	.....	.....	.....	.....
Oregon.....													
.....	147,063	115,270	30,000	1,793	87,270	30,000	1,793	28,000	9,283.79	4,319.77	299,647.50	11,361.64	281,009.14
Klamath.....	140,000	108,270	30,000	1,720	82,270	30,000	1,720	26,000	8,865.73	4,319.77	282,800.15	11,361.64	274,161.79
Umatilla.....	5,050	5,000	50	50	5,000	.....	50	.....	.....	.....	397.97	.....	397.97
Warm Springs.....	2,013	2,000	.....	13	.....	.....	13	2,000	371.06	.....	6,449.38	.....	6,449.38
South Dakota.....													
.....	34,765	32,500	.....	2,265	400	.....	260	34,105	2,343.71	195.48	71,514.54	883.35	72,397.89
Pierre.....	265	.....	.....	265	.....	.....	100	165	37.93	195.48	32,761.77	883.35	33,645.12
Pine Ridge.....	34,500	32,500	.....	2,000	400	.....	160	33,940	2,305.78	.....	38,463.57	.....	38,463.57
Rosebud.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	280.20	.....	280.20
Utah.....													
.....	97,621	85,514	8,570	3,537	80,094	570	537	16,420	1,060.34	114,165.75	849,471.38	309,852.86	1,159,324.24
Goshute.....	330	.....	300	30	.....	300	30	.....	10.16	1,087.25	888.30	1,087.25	1,975.55
Shirwis.....	277	.....	270	7	.....	270	7	.....	9.18	1,658.44	1,590.53	1,019.85	2,610.38
Utah and Ouray.....	97,014	85,514	8,000	3,500	80,094	.....	500	16,420	1,050.00	112,420.06	846,992.55	307,748.76	1,154,738.31
Washington.....													
.....	234,888	234,735	.....	153	162,035	.....	43	72,810	364,248.22	67,907.98	1,140,731.27	333,002.89	1,474,364.16
Culville.....	47,003	46,960	.....	43	41,960	.....	43	5,000	2,890.90	.....	49,595.72	2,201.34	51,797.06
Cushman.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,468.21	.....	1,468.21
Spokane.....	785	775	.....	10	75	.....	.....	710	.....	.....	1,529.96	.....	1,529.96
Yakima.....	187,100	187,000	.....	100	120,000	.....	.....	67,100	361,378.32	67,907.98	1,088,187.38	331,401.55	1,419,588.93
Wyoming: Shoshone.....													
.....	143,530	141,630	.....	1,900	72,985	.....	1,307	69,238	59,068.06	47,533.26	890,242.35	191,915.26	1,082,157.61
Administration: Special investigations, etc.....													
.....	.....	.....	.....	.....	.....	.....	.....	.....	947.31	.....	186,392.93	.....	186,392.93

1917 report.

**No living water.**

**State lands.**

TABLE 25.—Miles of ditches and use of irrigated areas on Indian reservations, fiscal year ended June 30, 1918.

States and superintendencies.	Ditches on reservation.		Allotment under ditch June 30, 1918.	Indians benefited by irrigation.	Irrigated lands allotted.	Acreage of irrigated lands cultivated by Indians and whites.							Within service of ditches June 30, 1918.	Remainder to be put under ditch.	
	Main.	Lateral.				Unallotted.	School and agency.	Total.	Value of crops.	By Indians.		Value of products.			
			Acres.	Number.	Acres.					Number engaged.	Acres.		Value of products.		
Grand total.....	1,357	3,085	14,944	31,530	116,694	225,486	76,428	3,484	305,398	\$5,247,012	14,154	167,278	\$2,851,270	586,392	* 938,732
Arizona.....	272	215	4,118	11,087	2,766	37,393	19,600	1,066	58,088	1,127,429	7,217	53,770	703,847	63,464	129,719
Camp Verde.....	2	2		106				120	120	4,300	21	120	4,300	130	78
Colorado River.....	20	26	511	110	2,766	4,070			1,566	418,546	110	1,314	47,920	6,810	98,190
Fort Apache.....	70	20		500			1,500	65	1,565	87,990	500	1,565	43,995	2,187	439
Havasupai.....	4	8		171			100	3	1,103	3,149	50	100	2,713	110	
Kaibab.....		1		81				32	32	614	16	32	614	75	4
Leupp.....		2						4	10	40				25	60
Moqui.....											(1)		(1)	10	
Navajo.....	60			3,000			10		2,268	76,500	2,080	2,268	76,500	2,268	9,980
Pima.....	56	61		4,397		26,250	12,210	271	38,731	133,800	3,387	38,460	132,200	38,731	6,700
Salt River.....	33	58		1,277		5,573		77	7,000	293,420	243	6,940	293,420	8,082	4,943
San Carlos.....	(1)	(1)		300		1,385	1,385	24	1,409	32,780	300	1,385	32,780	2,072	2,000
San Xavier.....	(1)	6		700		1,500		31	1,531	57,751	70	1,531	57,751	1,530	2,000
Truxton Canon.....	1	1		40			45		45	600	40	45	600	110	85
Western Navajo.....	20	25		405			1,000	200	1,200	17,940	400	1,000	11,065	1,326	12,240
California.....	118	148		3,448	5,040	9,348	2,865	276	12,509	608,521	966	7,407	305,912	15,142	30,794
Bishop.....	1			500	40	1,200		18	1,218	26,810	235	1,219	26,810	2,550	8,818
Campo.....	11	13		74		237	237	84	321	13,973	26	244	13,973	2,244	13
Digger.....	2			115		40	25		65	4,100	35	65	4,100	111	
Fort Bidwell.....	3	2		30		100		150	100	3,000	30	100	3,000	300	5,060
Fort Yuma.....	41	100		835	5,000	7,255			7,405	472,548	175	2,408	172,548	8,350	
Hoop Valley.....	(1)	(1)		(1)		4,200	160	16	4,360	27,275	85	2,408	26,166	2,413	
Maki.....	25	17		574		1,156	1,156		1,156	19,845	133	1,156	19,845	1,689	11,407
Pala.....	22	13		1,025		573	1,709	5	1,287	32,770	159	1,278	32,270	1,061	2,547
Soboba.....	5	2		145		418	418	2	420	5,200	50	420	5,200	380	2,817
Tule River.....	8	1		150		160	160	1	161	3,000	30	160	3,000	161	
Colorado: Southern Ute.....	40	15		250		3,268		141	3,409	43,450	90	1,921	23,830	5,160	7,670
Idaho: Fort Hall.....	55	129		1,859	10,981	13,381		341	13,722	249,964	223	6,922	118,734	28,780	20,040

Montana	284	1,244	3,602	5,800	16,348	20,830	19,846	207	40,078	460,411	677	20,680	226,591	204,080	241,862
Blackfoot.....	85	269	1,150	1,150	6,720	1,970	.....	.....	1,976	*24,553	.....	1,976	24,553	28,240	83,260
Crow.....	69	184	1,772	1,600	7,000	19,000	.....	.....	10,157	*68,358	230	12,000	98,358	72,640	81,092
Flathead.....	14	723	680	1,800	2,628	7,290	8,535	157	15,805	*279,770	71	2,669	47,570	84,300	17,220
Fort Belknap.....	28	68	.....	1,000	.....	.....	10,800	.....	10,800	*32,062	270	10,800	32,062	18,800	17,220
Fort Peck.....	.....	.....	.....	.....	.....	1,635	.....	.....	1,585	19,538	.....	1,585	18,238	.....	7,500
Tongue River.....	8	8	.....	*60	.....	.....	510	140	650	5,800	.....	.....	5,800	1,000	2,620
Nevada.....	62	96	721	1,229	40	3,435	1,437	102	5,034	137,965	555	4,928	134,641	30,497	31,614
Fallon.....	4	21	369	312	.....	954	.....	27	981	17,720	64	999	17,120	3,720	.....
Fort McPerritt.....	7	.....	110	100	.....	743	55	19	817	3,731	53	743	3,525	647	1,116
Mojave River.....	6	5	117	113	.....	350	.....	.....	350	19,650	38	350	19,650	900	.....
Nevada.....	8	33	.....	200	Nevada.....	.....	312	30	342	12,834	200	312	11,834	21,030	.....
Walker River.....	12	12	125	501	40	1,388	.....	16	1,404	38,525	95	1,454	37,665	2,500	3,535
Western Shoshone.....	25	25	.....	103	.....	.....	1,070	70	1,140	45,396	75	1,070	44,747	2,000	26,943
New Mexico.....	237	254	50	5,872	.....	100	32,310	710	33,120	670,969	3,645	32,880	651,433	42,225	18,575
Jicarilla.....	11	3	50	100	.....	100	.....	230	330	3,317	50	100	500	*805	1,405
Mescalero.....	4	.....	.....	20	.....	.....	280	40	300	25,437	20	300	20,437	300	100
Pueblo Bonito n.....	197	200	.....	3,024	.....	.....	22,050	.....	22,050	409,012	2,050	22,050	409,013	26,930	.....
San Juan.....	15	22	.....	925	.....	5,000	5,000	320	5,320	133,795	925	5,320	122,075	9,070	5,070
Zuni.....	10	30	.....	*1,803	.....	.....	5,000	120	5,120	99,408	600	5,110	99,408	5,120	2,000
Oregon.....	28	31	200	188	900	3,400	.....	300	3,700	64,500	37	3,000	45,000	12,200	134,953
Klamath.....	22	29	200	148	700	3,200	.....	300	3,500	52,500	37	3,000	45,000	12,000	128,000
Umatilla.....	6	2	.....	40	200	200	.....	.....	200	12,000	.....	.....	.....	200	4,850
Warm Springs.....	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2,013
South Dakota: Pine Ridge.....	9	.....	6	.....	.....	.....	.....	75	75	2,000	.....	.....	.....	560	33,940
Utah.....	156	3	803	434	44,000	70,908	370	37	71,315	451,240	271	9,285	120,790	80,701	16,920
Goehute.....	6	24	.....	168	.....	.....	300	30	330	11,000	30	300	11,000	330	.....
Shilwita.....	3	1	.....	105	.....	.....	70	7	77	3,900	80	77	3,450	277	.....
Uintah and Ouray.....	147	468	803	161	44,000	70,908	.....	.....	70,908	436,340	161	8,908	106,840	80,094	16,920

\* Data incomplete.  
 \* Does not include Pierre, Standing Rock, and Fort Lapwai, which show an irrigable area of 90,595 acres preceding table.  
 \* Overestimated last year.  
 \* Not reported.  
 \* Dry ditches.  
 \* 1917 report.  
 \* Former report.  
 \* As reported.  
 \* Does not include crop value of leased land.  
 \* Former report pertained to allotments.  
 \* No living water on land.



TABLE 25.—Miles of ditches and use of irrigated areas on Indian reservations, fiscal year ended June 30, 1918—Continued.

States and superintendencies.	Ditches on reservation.		Allotment under fitted ditch June 30, 1918.	Indians benefited by irrigation.	Irrigated lands allotted or leased.	Acreage of irrigated lands cultivated by Indians and whites.								Within service of ditches June 30, 1918.	Remainder to be put under ditch.
	Main.	Miles.				Unallotted.	School and agency.	Total.	Value of crops.	By Indians.		Value of products.			
										Number engaged.	Acreage.				
Washington.....	122	Miles. 660	Number. 1, 152	Number. 717	Acre. 36, 684	47, 144	.....	50	47, 194	1, 288, 490	238	10, 226	378, 710	Acres. 60, 683	174, 205
Colville.....	41	10	52	217	684	1, 744	.....	50	1, 794	30, 540	63	826	20, 760	1, 828	45, 175
Spokane.....	81	650	1, 100	500	36, 000	1 45, 400	.....	.....	1 45, 400	1, 257, 950	175	9, 400	357, 950	58, 855	138, 245
Yakima.....	24	290	1, 201	1, 350	.....	7, 259	.....	.....	7, 259	142, 182	245	7, 259	142, 182	45, 000	98, 530
Wyoming: Shoshone .....															

: Estimated.

TABLE 26.—Allotments approved by the department during the fiscal year ended June 30, 1918, and made in the field.

States and tribes, or reservations.	Approved by department.		Made in the field.	
	Number.	Acreage.	Number.	Acreage.
<b>Total</b> .....	<b>4,092</b>	<b>1,121,084</b>	<b>4,281</b>	<b>72,830</b>
<b>Arizona</b> .....	<b>16</b>	<b>310</b>	<b>3,580</b>	<b>34,185</b>
Ak Chin.....			164	403
Colorado River.....	15	150	3	30
Pima (Chihu Chulschu).....			6	15
Pima (Gila River).....			3,407	33,737
Public domain.....	1	160		
<b>California</b> .....	<b>18</b>	<b>1,391</b>	<b>277</b>	<b>1,385</b>
Maki.....			277	1,385
Public domain.....	18	1,391		
<b>Minnesota: Fond du Lac</b> .....	<b>5</b>	<b>360</b>		
<b>Montana</b> .....	<b>3,105</b>	<b>1,015,632</b>	<b>33</b>	<b>3,385</b>
Blackfeet.....	2,649	886,979		
Crow.....	1	160		
Fort Peck.....	438	126,054		
Public domain (Turtle Mountain).....	17	2,439	33	3,385
<b>Nevada</b> .....	<b>2</b>	<b>104</b>	<b>2</b>	<b>90</b>
Paiute.....			1	10
Public domain.....	2	104	1	80
<b>New Mexico: Public domain</b> .....	<b>5</b>	<b>799</b>	<b>6</b>	<b>960</b>
<b>North Dakota: Public domain (Turtle Mountain)</b> .....	<b>7</b>	<b>1,040</b>		
<b>Oregon</b> .....			<b>383</b>	<b>32,826</b>
Klamath.....			38	4,636
Umatilla.....			350	28,189
<b>South Dakota</b> .....	<b>388</b>	<b>60,431</b>		
Cheyenne River.....	193	30,996		
Pine Ridge.....	195	28,435		
<b>Washington: Public domain</b> .....	<b>1</b>	<b>80</b>		
<b>Wisconsin: La Pointe</b> .....	<b>545</b>	<b>31,937</b>		
<b>Total reservations</b> .....	<b>4,041</b>	<b>1,115,071</b>	<b>4,241</b>	<b>68,405</b>
<b>Total public domain</b> .....	<b>51</b>	<b>6,013</b>	<b>40</b>	<b>4,425</b>

TABLE 27.—*Sales of Indians' allotted lands during fiscal year ended June 30, 1918.*

States and superintendencies.	Noncompetent sales. <sup>1</sup>			Inherited-land sales. <sup>2</sup>		
	Number of tracts.	Acreage.	Proceeds.	Number of tracts.	Acreage.	Proceeds.
Grand total.....	4,657	514,963.92	\$3,717,748.14	9,438	1,159,582.14	\$18,601,359.34
Total, 1918.....	662	74,126.00	1,541,178.00	438	49,216.00	1,174,855.00
1917.....	588	69,846.00	1,040,202.00	655	75,992.00	1,546,965.06
1916.....	583	54,958.62	969,611.24	324	35,762.25	694,241.40
1915.....	422	34,429.09	584,724.56	393	69,245.45	715,568.52
1914.....	529	45,526.31	779,526.14	418	45,241.99	773,309.16
1913.....	208	20,778.80	407,315.56	109	10,797.94	285,097.72
1912.....	324	34,391.11	568,880.75	392	43,652.27	889,285.02
1911.....	494	56,197.98	978,598.27	638	79,665.66	1,503,960.38
1910.....	520	82,655.80	1,245,639.96	873	129,359.61	1,956,315.92
1909.....	235	34,080.33	442,762.85	753	102,708.00	1,321,258.72
1908.....	92	7,990.88	159,318.81	768	91,302.57	1,302,506.94
1907.....				820	106,359.25	1,248,793.34
1906.....				643	64,447.67	961,430.87
1905.....				978	90,214.97	1,398,131.52
1904.....				1,236	122,222.52	2,067,464.50
1903.....				(*)	44,493.99	787,173.25
Colorado: Southern Ute.....	4	124	890	5	840	5,600
Idaho.....	17	1,464	50,212	26	2,145	83,377
Coeur d'Alene.....	5	559	10,317	4	481	8,798
Fort Lapwai.....	12	905	39,895	22	1,664	74,579
Kansas: Potawatomi.....	12	660	29,248	2	158	6,812
Minnesota.....	27	1,430	24,820	11	562	9,265
Fond du Lac.....	4	180	2,377			
Leech Lake.....	15	630	7,733	11	562	9,265
White Earth.....	8	640	14,710			
Montana.....	42	5,606	76,770	91	11,242	166,182
Crow.....	17	1,111	21,600	47	7,331	65,896
Flathead.....	12	910	21,226	39	3,393	81,070
Fort Peck.....	13	3,585	33,934	5	618	19,216
Nebraska.....	54	2,959	262,566	38	1,908	166,381
Omaha.....	27	1,586	145,024	9	600	51,411
Winnebago.....	27	1,373	117,542	29	1,808	114,970
North Dakota.....	73	9,199	127,215	16	1,579	22,173
Fort Berthold.....	3	320	29,450			
Fort Totten.....	11	675	11,041	11	859	14,602
Standing Rock.....	18	3,683	29,363	2	320	1,465
Turtle Mountain.....	41	4,521	57,361	3	400	6,106
Oklahoma.....	172	18,926	408,766	96	11,668	252,837
Cantonment.....	32	4,300	72,556	15	2,164	36,193
Cheyenne and Arapaho.....	53	6,615	140,528	27	3,757	89,433
Kiowa.....	33	3,722	107,672	3	202	544
Osage.....	13	1,664	11,474	3	750	3,873
Otoe.....	2	2	130			
Pawnee.....	16	1,097	32,336	23	2,256	71,860
Ponca.....	13	640	25,635	5	474	14,965
Sac and Fox.....	2	240	5,161	2	164	3,566
Sage.....	5	326	6,436			
Seneca.....	2	280	5,338	15	1,460	106,068
Shawnee.....	1	40	1,500	5	441	24,305

<sup>1</sup> Under act of March 1, 1907 (34 Stat. L., 1015-1018), modified by acts of May 29, 1906 (35 Stat. L., 444), June 25, 1910 (36 Stat. L., 855-856), and Feb. 14, 1913 (37 Stat. L., 678-679).

<sup>2</sup> Under act of May 27, 1902 (32 Stat. L., 245-275), modified by acts of May 2, 1906 (34 Stat. L., 182), May 29, 1908 (36 Stat. L., 444), June 25, 1910 (36 Stat. L., 855-856), and Feb. 14, 1913 (37 Stat. L., 678-679).

\* Includes sales of lands of Kaw, Osage, and Five Civilized Tribes.

\* Includes sales of Five Civilized Tribes.

\* Unknown.

TABLE 27.—*Sales of Indians' allotted lands during fiscal year ended June 30, 1918—Continued.*

States and superintendencies.	Noncompetent sales.			Inherited-land sales.		
	Number of tracts.	Acreage.	Proceeds.	Number of tracts.	Acreage.	Proceeds.
Oregon.....	41	5,418	96,495	28	3,676	81,362
Klamath.....	18	2,406	25,612	20	2,962	30,697
Roseburg.....	18	2,504	23,123	2	274	3,250
Umatilla.....	5	508	47,760	6	440	47,415
South Dakota.....	162	25,326	392,143	63	11,335	168,587
Cheyenne River.....	6	1,514	7,760	9	3,151	21,364
Lower Brulé.....	14	2,235	20,784	1	640	4,229
Pine Ridge.....	20	5,563	37,921	7	2,260	10,967
Rosebud.....	62	12,360	170,276	14	2,602	33,892
Sisseton.....	12	791	26,667	17	1,738	49,375
Yankton.....	48	2,863	123,735	15	944	48,760
Utah: Uintah and Ouray.....	20	1,118	16,700	16	1,037	15,407
Washington.....	21	876	37,634	27	1,973	72,814
Colville.....	6	199	3,620	.....	.....	.....
Cushman.....	2	40	1,948	3	165	4,890
Tulalip.....	2	58	5,631	3	120	3,150
Yakima.....	11	579	26,135	21	1,688	64,774
Wisconsin.....	2	69	1,555	6	293	9,150
Oneida.....	2	69	1,555	5	173	7,200
Hayward.....	.....	.....	.....	1	120	1,950
Wyoming: Shoshone.....	15	951	16,164	11	800	14,908

TABLE 28.—*Patents in fee issued under act of May 8, 1906 (34 Stat. L., 182), as modified by acts of May 29, 1908 (35 Stat. L., 444), and June 25, 1910 (36 Stat. L., 855).*

States and superintendencies.	Patents in fee issued from May 8, 1906, to June 30, 1918.				Applications for patents in fee during fiscal year ended June 30, 1918.			
	Original allotments.		Inherited land.		Re-ceived.	De-nied.	Approved.	
	Num-ber.	Acreage.	Num-ber.	Acreage.			Num-ber.	Acreage.
Total.....	17,959	2,139,560.44	2,649	312,357.50	4,723	344	4,379	704,269
Arizona: San Xavier.....	1	40.00	1	12.40	.....	.....	.....	.....
California.....	28	1,752.48	3	106.52	12	4	8	461
Bishop.....	2	280.00	.....	.....	.....	.....	.....	.....
Greenville.....	1	80.00	.....	.....	.....	.....	.....	.....
Hoopa Valley.....	19	1,227.48	2	96.52	7	2	5	361
Round Valley.....	6	165.00	1	10.00	5	2	3	160
Idaho.....	349	46,806.86	64	4,232.18	145	14	131	16,338
Coeur d'Alene.....	172	27,252.97	6	947.65	56	5	51	8,482
Fort Hall.....	69	11,403.94	.....	.....	17	2	15	2,628
Fort Lapwai.....	108	8,149.95	58	3,284.53	72	7	65	5,228
Kansas.....	282	20,830.53	94	7,815.79	144	20	124	10,036
Kickapoo.....	150	9,441.14	52	4,492.30	68	12	56	3,785
Potawatomi.....	132	11,389.39	42	3,323.49	76	8	68	6,251
Michigan: Mackinac and Mount Pleasant.....	29	1,903.28	4	202.24	12	.....	12	620

TABLE 28.—*Patents in fee issued under act of May 8, 1906 (34 Stat. L., 182), as modified by acts of May 29, 1908 (35 Stat. L., 444), and June 25, 1910 (36 Stat. L., 855)*—Continued.

States and superintendencies.	Patents in fee issued from May 8, 1907, to June 30, 1918.				Applications for patents in fee during fiscal year ended June 30, 1918.			
	Original allotments.		Inherited land.		Re- ceived.	De- nied.	Approved.	
	Num- ber.	Acreage.	Num- ber.	Acreage.			Num- ber.	Acreage.
Minnesota.....	3, 827	305, 882. 23	34	2, 382. 80	161	2	159	12, 191
Fond du Lac.....	41	2, 737. 50	7	360. 00	21	.....	21	1, 229
Grand Portage.....	24	1, 989. 32	3	240. 00	1	.....	1	60
Leech Lake.....	168	13, 538. 52	15	1, 076. 00	125	2	123	9, 800
Nett Lake.....	21	1, 778. 89	9	706. 50	14	.....	14	1, 102
White Earth.....	1 3, 573	285, 840. 00	.....	.....	.....	.....	.....	.....
Montana.....	1, 411	293, 407. 83	358	46, 715. 28	838	37	801	195, 227
Blackfeet.....	438	135, 878. 35	2	254. 62	436	.....	436	135, 212
Crow.....	106	19, 994. 30	211	25, 875. 37	36	3	33	5, 531
Flathead.....	550	48, 312. 63	56	4, 465. 29	182	27	155	12, 980
Fort Peck.....	317	89, 222. 55	89	16, 120. 00	184	7	177	41, 504
Nebraska.....	1, 162	78, 366. 22	527	47, 608. 84	167	46	121	7, 324
Omaha.....	626	40, 049. 94	191	24, 811. 00	67	13	54	3, 053
Ponca.....	26	3, 365. 08	.....	.....	.....	.....	.....	.....
Santee.....	302	23, 353. 80	268	18, 708. 00	28	6	22	2, 124
Winnebago.....	208	11, 597. 42	68	4, 089. 84	72	27	45	2, 147
Nevada: Carson.....	3	360. 00	.....	.....	.....	.....	.....	.....
North Dakota.....	1, 556	302, 080. 00	203	32, 640. 47	417	39	378	88, 285
Fort Berthold.....	69	17, 565. 90	8	844. 00	41	.....	41	10, 997
Fort Totten.....	84	7, 672. 80	40	3, 190. 67	28	26	2	30
Standing Rock.....	482	151, 838. 85	63	10, 182. 21	187	.....	187	57, 940
Turtle Mountain.....	921	125, 002. 46	102	18, 423. 59	161	13	148	19, 268
Oklahoma.....	3, 373	297, 050. 94	464	49, 046. 50	944	60	884	83, 196
Cantonment.....	56	8, 050. 88	29	4, 412. 66	5	1	4	796
Cheyenne and Arap- aho.....	500	57, 930. 98	27	4, 036. 49	176	5	171	25, 206
Kiowa.....	220	29, 564. 14	24	3, 837. 86	69	3	66	9, 949
Otoe.....	148	12, 794. 38	20	2, 738. 15	61	5	56	2, 393
Pawnee.....	160	18, 297. 31	58	5, 641. 58	133	13	110	12, 664
Ponca.....	262	22, 166. 01	38	4, 443. 36	193	27	166	14, 145
Sac and Fox.....	200	22, 153. 93	42	5, 246. 00	18	3	15	1, 640
Seger.....	43	4, 357. 77	2	560. 00	1	1	.....	.....
Seneca.....	1, 130	66, 810. 08	189	12, 428. 46	273	.....	273	14, 671
Shawnee.....	654	54, 935. 46	35	5, 670. 94	25	2	23	1, 733
Oregon.....	490	46, 094. 75	94	8, 741. 62	168	16	152	20, 044
Klamath.....	108	18, 245. 27	5	802. 72	71	2	69	12, 333
Roseburg.....	19	2, 784. 09	10	1, 511. 26	4	.....	4	607
Siletz.....	26	2, 182. 78	18	1, 620. 72	15	6	9	904
Umatilla.....	330	22, 232. 61	56	4, 016. 89	78	8	70	6, 200
Warm Springs.....	5	680. 00	5	760. 00	.....	.....	.....	.....
South Dakota.....	3, 204	608, 004. 76	410	73, 214. 60	988	92	896	212, 292
Cheyenne River.....	408	120, 904. 84	46	9, 261. 86	164	16	148	44, 567
Crow Creek.....	116	17, 794. 91	76	12, 881. 82	70	25	45	6, 747
Lower Brule.....	113	27, 369. 23	7	1, 069. 92	20	1	19	3, 120
Pine Ridge.....	891	203, 722. 52	164	32, 972. 29	356	10	346	99, 326
Rosebud.....	631	131, 392. 25	77	13, 474. 54	306	18	288	53, 948
Siouxton.....	218	22, 301. 72	11	1, 124. 14	35	18	17	1, 720
Yankton.....	827	84, 489. 29	29	2, 430. 03	37	4	33	2, 864
Utah: Uintah and Ouray	6	448. 00	.....	.....	2	.....	2	206

<sup>1</sup> Restrictions removed under act June 21, 1906 (34 Stat. L., 353).

TABLE 28.—*Patents in fee issued under act of May 8, 1906 (34 Stat. L., 182), as modified by acts of May 29, 1908 (35 Stat. L., 444), and June 25, 1910 (36 Stat. L., 855).—Continued.*

States and superintendencies.	Patents in fee issued from May 8, 1906, to June 30, 1918.				Applications for patents in fee dur- ing fiscal year ended June 30, 1918.			
	Original allotments.		Inherited land.		Re- ceived.	De- nied.	Approved.	
	Num- ber.	Acreage.	Num- ber.	Acreage.			Num- ber.	Acreage.
Washington.....	613	55, 149. 09	312	24, 185. 51	404	10	394	37, 367
Colville.....	225	23, 194. 30	4	320. 00	159	.....	159	17, 820
Cushman.....	7	730. 00	3	153. 90	1	.....	1	160
Spokane.....	94	9, 390. 50	.....	.....	51	3	48	5, 324
Taholah.....	44	3, 370. 00	2	100. 00	47	2	45	3, 450
Tulalip.....	19	2, 135. 36	1	163. 85	6	1	5	321
Yakima.....	224	16, 328. 93	302	23, 387. 76	140	4	136	10, 292
Wisconsin.....	1, 477	66, 435. 49	245	13, 211. 40	244	1	243	13, 610
Hayward.....	80	6, 135. 04	.....	.....	65	1	64	4, 974
Lac du Flambeau.....	14	1, 034. 14	7	538. 10	2	.....	2	160
La Pointe.....	131	10, 053. 98	27	2, 364. 09	40	.....	40	2, 886
Oneida.....	1, 206	46, 492. 03	210	10, 229. 21	129	.....	129	5, 229
Red Cliff.....	46	2, 720. 30	1	80. 00	8	.....	8	361
Wyoming: Shoshone.....	138	14, 077. 98	36	2, 241. 65	67	3	64	6, 170
Public domain.....	10	900. 00	.....	.....	10	.....	10	900

SUMMARY OF PATENTS IN FEE ISSUED UNDER ACT OF MAY 8, 1906.

	Applica- tions ap- proved.	Acreage approved.
1907.....	889	92, 132. 50
1908.....	1, 987	153, 991. 78
1909.....	1, 166	133, 331. 79
1910.....	965	99, 339. 10
1911.....	1, 011	115, 575. 37
1912.....	344	45, 539. 49
1913.....	520	67, 477. 49
1914.....	1, 148	152, 405. 44
1915.....	940	124, 114. 86
1916.....	934	130, 980. 43
1917.....	2, 203	265, 440. 00
1918.....	4, 379	704, 269. 00
Total.....	16, 476	2, 084, 587. 26

TABLE 29.—*Removals of restrictions.*

Fiscal year.	Quapaw (Seneca), Okla. <sup>1</sup>		Five Civilized Tribes. <sup>2</sup>	
	Number.	Acreage.	Number.	Acreage.
Aggregate.....	544	27,686.40	11,455	801,202.04
1918.....	24	990.00	1,532	141,524.30
1917.....	20	916.88	1,438	165,403.17
1916.....	30	1,401.45	997	42,103.60
1915.....	25	1,095.28	796	50,077.33
1914.....	72	3,889.35	1,106	81,084.72
1913.....	37	1,930.00	956	60,532.04
1912.....	38	3,218.28	652	45,075.51
1911.....	68	4,104.91	953	84,679.34
1910.....	215	10,170.25	1,470	88,070.34
1909.....			1,865	52,761.09

<sup>1</sup> Act of Mar. 3, 1908 (35 Stat. L., 751).<sup>2</sup> Act of May 27, 1908 (35 Stat. L., 312); by departmental approval.

NOTE.—Act of Congress dated May 27, 1908 (35 Stat. L., 312), removing restrictions from all lands of intermarried whites, freedmen, and Indians of less than half Indian blood, and from all lands except homesteads of Indians having half or more than half and less than three-quarters Indian blood, operated to remove restrictions from the lands of 70,000 Indians, who held 8,000,000 acres.

TABLE 30.—*Certificates of competency issued during fiscal year ended June 30, 1918, under act of June 25, 1910 (36 Stat. L., 855), to Indians holding fee patents with restrictions as to alienation.*

Indians to whom issued	Number.	Acreage.
Aggregate.....	433	37,899
1918.....	90	7,533
1917.....	65	4,440
1916.....	90	9,042
1915.....	65	5,616
1914.....	33	3,951
1913.....	23	1,600
1912.....	25	1,917
1911.....	42	3,810
Fort Hall, Idaho.....	15	2,628
Mount Pleasant, Mich.....	12	620
Fond du Lac, Minn.....	21	1,229
Lac du Flambeau, Wis.....	2	160
La Pointe, Wis.....	40	2,896

TABLE 31.—*Certificates of competency issued to Kaw and Osage Indians.*

Fiscal year.	Kaw. <sup>1</sup>		Osage. <sup>2</sup>	
	Number.	Acreage.	Number.	Acreage.
Aggregate.....	69	19,504	499	245,845
1918.....	10	1,000	17	8,330
1917.....	7	1,120	21	10,395
1916.....			4	1,960
1915.....	5	800	12	5,880
1914.....	12	1,904	4	1,960
1913.....	1	400	23	10,880
1912.....	1	480	22	10,880
1911.....			84	41,160
1910.....			293	143,570
1909.....	20	8,000	19	9,310
1908.....	6	2,400		
1907.....	6	2,400		
1906.....	1	400		

<sup>1</sup> Act July 1, 1902 (32 Stat. L., 636)<sup>2</sup> Act June 28, 1906 (34 Stat. L., 539).

TABLE 32.—*Lands leased for mining purposes and production of minerals and royalty therefor, fiscal year ended June 30, 1918.*

States and superintendencies.	Kind of lease.	1899 to 1917 (both inclusive).				Fiscal year ended June 30, 1918.					
		Total production.	Acreage.	Advance royalty and annual rental.	Royalty on production.	Bonus.	Total production.	Acreage.	Advance royalty and annual rental.	Royalty on production.	Bonus.
Total.....			2,255,810	\$3,222,787	\$31,413,502	\$4,994,253		1,722,814	\$1,353,200	\$8,352,020	\$3,694,328
California: Greenville.....	Miscellaneous.		80								
New York: New York Agency.....	(Oil (barrels)).	10,765			19,457					2,243	
Oklahoma.....	(Gas (cubic feet)).	1,836,652,796	1,900	2,675	11,107		615	( <sup>a</sup> )		3,000	
			2,181,847	3,165,073	31,355,031	4,994,574	1,519,504	1,653,620	1,306,878	8,341,426	3,493,603
Cantonment.	Miscellaneous.		480		134						
Cheyenne and Arapaho.	Oil and gas.		20,228	3,034		28,774		9,566	4,525	1,743	
Kiowa.....	do.		36,287	18,933	8,839,518	4,274,879	7,092	42,660	25,208	3,795,083	3,268,313
Osage.....	(Oil (barrels)).		900,000	148,698	973,189		10,906,377	280,228	104,049	807,717	
Otoe.....	do.		62,946	66,639		138,571	( <sup>a</sup> )	62,945		300	
Pawnee.....	(Oil (barrels)).		64,000	86,133	33,382	27,749	4,660	84,007	4,925	104,854	8,644
Ponca.....	do.		1,073,874		131,755	11,000	134,674			24,801	
Sac and Fox.....	(Gas).		1,040	7,580	3,061		( <sup>a</sup> )	1,040		900	
Shawnee.....	Oil (barrels).		35,305	105,234	22,973			17,509	24,362		4,424
	do.		6,625	280	141,660			5,090		924	9,254
	do.	268,938,048	823,332	2,418,082	7,107,167	1448,968	13,140,464	116,037	899,894	3,142,191	212,968
Five Civilized Tribes (restricted lands).....	Gas.		( <sup>a</sup> )	( <sup>a</sup> )	385,732		( <sup>a</sup> )	( <sup>a</sup> )	( <sup>a</sup> )	163,409	
	Coal (tons).	1,408,402	12,014	5,143	108,993		268,298	80	3,500	21,917	
Miscellaneous.....		13,733	106,052	101,334	4,022	1,748	3,227,565	109,638	217,978	258,208	
Coal (tons). <sup>a</sup>		48,610,343	106,653	193,283	3,742,229		( <sup>a</sup> )	3,890	2,500		
Asphalt (tons). <sup>a</sup>		57,215	3,880	112,500	25,949			12,682	4,254		1,220
South Dakota: Pine Ridge.....	Oil and Gas.										
Washington: Spokane.....	Miscellaneous.		1,380	570			15,109	1,875	1,208	112	
Wyoming.....			70,603	84,445	27,907	1,679		54,637	40,860	5,239	189,505
	(Oil (barrels)).	29,620	9,000	8,886	207	1,679	43,481	5,123	9,061	4,549	3,039
Shoshone.....	Coal (tons).	6,224	1,562	1,800	80		1,207	221		121	
	Miscellaneous.	180	9,307	4,763	8		( <sup>a</sup> )		166		
	Oil (barrels). <sup>a</sup>	33,852		20,100	4,216		6,035	49,268	31,633	569	186,476
	Coal (tons). <sup>a</sup>	357,225	50,734	18,836	23,366						



TABLE 33.—Buildings, etc., completed during the fiscal year ended June 30, 1918.

State and superintendencies.	Improvement.	Cost.
Total.....		\$400,435.19
<b>Arizona:</b>		
Fort Apache.....	Boys' lavatory annex.....	2,630.00
Do.....	Completing dormitory.....	1,000.00
Do.....	Forester's cottage.....	700.00
Do.....	Improvements to sewer.....	500.00
Salt River.....	Cottage, barn, shed, and tank.....	3,170.00
Do.....	Repairing farmers' quarters.....	1,261.20
San Xavier (Indian Oas's).....	Main buildings, lighting, water, and sewer systems.....	26,101.69
Do.....	Barn.....	1,620.00
Do.....	Shop.....	800.00
Do.....	Repairs to buildings.....	488.53
Pima.....	Office.....	3,159.65
Do.....	Warehouse.....	6,228.97
Do.....	Superintendent's cottage.....	3,105.76
Do.....	Employees' cottage.....	2,504.22
Do.....	Field matron's cottage.....	1,333.14
Do.....	Cotton gin.....	1,270.00
Do.....	Alterations to school building.....	785.59
Do.....	Employees' quarters.....	1,109.00
Do.....	Three cottages.....	1,974.00
Navajo.....	Completing a dormitory.....	680.00
Leupp.....	Winslow bridge.....	15,824.40
Colorado River.....	Ice plant.....	2,750.00
Rice Station.....	Reservoir.....	1,900.00
San Carlos.....	Piping for water mains.....	1,405.20
Do.....	Repairs to Black River bridge.....	847.00
<b>California:</b>		
Round Valley.....	One day school.....	1,065.00
Greenville.....	Gymnasium.....	1,075.00
Do.....	Concreting reservoir.....	1,115.00
Fort Bidwell.....	Garage.....	500.00
Do.....	Lavatory annex.....	2,084.50
Campo.....	Two frame buildings.....	650.00
Fort Yuma.....	Horse barn and corral.....	1,305.34
Do.....	Dairy barn.....	1,157.77
Sherman.....	Employees' cottage.....	801.62
Do.....	Forge and shop.....	687.52
Do.....	Addition and screen porches to Minnehaha Lodge.....	3,024.98
<b>Colorado:</b>		
Southern Ute.....	Pump house.....	2,310.66
Do.....	Hay shed.....	1,250.00
Do.....	Commissary.....	2,100.00
Do.....	Barn.....	1,500.00
Do.....	Granary.....	381.50
<b>Idaho:</b>		
Fort Lapwai.....	Heating system, office.....	1,075.00
Do.....	Employees' cottage.....	4,199.55
Do.....	Dairy barn.....	2,200.00
Fort Lapwai Sanatorium.....	Silo.....	838.05
Do.....	Repairs to cottage and office.....	1,726.81
<b>Kansas:</b>		
Haskell.....	Hog house.....	490.00
Do.....	Chicken house.....	550.00
Do.....	Barn.....	3,907.00
<b>Michigan:</b>		
Mount Pleasant.....	Dairyman's cottage.....	1,400.00
Do.....	Hennery.....	1,200.00
<b>Minnesota:</b>		
Red Lake (Cross Lake).....	Remodeling main building.....	6,971.97
Do.....	Heating plants.....	2,761.58
Nett Lake Agency.....	Two employees' quarters.....	2,600.00
Nett Lake School.....	Three employees' quarters.....	5,000.00
Do.....	Garage.....	250.00
Pipestone.....	Ditch work.....	1,900.00
Do.....	Repairs to dining hall.....	609.50
Do.....	Septic tank and sewer.....	5,500.00
Do.....	Heating system.....	16,000.00
White Earth.....	Dairy barn.....	2,000.00
Do.....	Remodeling dormitory.....	5,511.62
Do.....	Heating installation, dormitory.....	599.81
Montana: Rocky Boy.....	Log house for farmer.....	657.00
<b>Nebraska:</b>		
Genoa.....	Boiler, water and sewer systems.....	3,580.00
Do.....	Addition to hospital.....	2,500.00
Santee.....	Niobrara bridge, 65-foot span.....	6,500.00
<b>Nevada:</b>		
Fort McDermitt.....	Sewer system.....	1,481.24
Western Shoshonis.....	Employees' quarters.....	1,700.00
Fallon.....	Guest room, addition to employees' quarters.....	850.00
Moapa River.....	Schoolhouse.....	1,807.00
Carson.....	Dairy barn.....	5,000.00
Do.....	Addition to gymnasium.....	1,899.17
Do.....	Addition to hospital.....	2,880.08
Walker River.....	Flour mill.....	2,645.15

TABLE 33.—Buildings, etc., completed during the fiscal year ended June 30, 1918—Con.

State and superintendencies.	Improvement.	Cost.
<b>New Mexico:</b>		
Zuni.....	Coal shed.....	\$250.00
Mescalero.....	(Lerk's cottage.....	2,500.00
Jicarilla.....	Hay barn.....	600.00
Do.....	Garage.....	300.00
Do.....	(cottage No. 9.....	2,000.00
Pueblo Bonito.....	Industrial building.....	7,550.00
Tohatchi.....	Addition to schoolhouse.....	30,225.00
San Carlos.....	Repairs to bridge.....	1,173.60
San Juan.....	Ice plant.....	1,377.00
Do.....	Completing hospital.....	3,510.76
<b>North Dakota:</b>		
Turtle Mountain.....	Cisterns 1, 2, and 3.....	1,200.00
Fort Berthold.....	Machine shed.....	1,215.22
Fort Totten.....	Drilling well.....	2,125.17
<b>Oklahoma:</b>		
Cherokee O. T. School.....	Tahlequah road.....	10,000.00
Do.....	Heating plant, main building and schoolhouse.....	6,000.00
Kiowa.....	Physician's cottage.....	3,249.50
Do.....	Employees' quarters.....	3,249.50
Do.....	Principal's cottage.....	2,649.07
Kiowa (Fort Sill).....	Sleeping porches for dormitories.....	2,200.00
Kiowa (Riverside).....	Heating system, principal's cottage.....	807.00
Kiowa (Rainy Mountain).....	Repairing boys' building.....	560.00
Eucsee boarding school.....	Dairy barn.....	2,000.00
Do.....	Cellar.....	300.00
Do.....	Blacksmith shop.....	200.00
Mekuskey.....	Septic tank.....	482.00
Eufaula.....	Employees' Lodge.....	7,018.00
Nuyaka.....	Manual-training shop.....	3,348.03
Pawnee.....	Barn and implement shed.....	1,025.00
Ponca.....	Warehouse.....	584.14
Bloomfield.....	Water mains.....	1,700.00
Do.....	Sewer connection with city of Ardmore.....	2,500.00
Do.....	Gas piping.....	1,999.80
Cantonment.....	Improvements to water system.....	2,849.96
Seger.....	Cottage.....	1,565.28
<b>Oregon:</b>		
Umatilla.....	Two steel bridges (Mission and Thorn Hollow).....	28,000.00
Do.....	Wagon house.....	508.25
Do.....	Garage.....	292.05
Salem.....	Onion house.....	1,000.00
Do.....	Remodelling sewer.....	4,700.00
Do.....	Boiler installation.....	2,075.00
Klamath.....	Garage.....	644.23
<b>Pennsylvania:</b>		
Carlisle.....	Refrigerator.....	600.00
<b>South Dakota:</b>		
Lower Brule.....	Barn.....	2,000.00
Do.....	Garage.....	665.00
Do.....	Repairs to water pipes.....	975.00
Pierre.....	Dairy barn.....	3,958.03
Do.....	Boiler installation.....	4,000.00
Springfield.....	Superintendent's cottage.....	4,095.00
Flandreau.....	Coal shed.....	412.45
Do.....	Chicken house.....	457.15
Do.....	Horse barn.....	2,267.30
Rosebud.....	Physician's cottage.....	4,684.10
Do.....	Council hall.....	500.00
Yankton.....	Completing water system.....	2,385.55
Canton Asylum.....	Two cisterns.....	1,094.50
Cheyenne River.....	Farmers' cottage.....	2,447.42
Do.....	Barn.....	800.00
Do.....	Repairing bridge, Whitehorse.....	485.00
<b>Utah:</b>		
Uintah.....	Heating plant hospital.....	3,750.00
Shivwits.....	Granary.....	435.00
Goshute.....	Cottage.....	600.00
<b>Washington:</b>		
Spokane.....	...do.....	672.00
Tulalip.....	Chicken house.....	191.46
Do.....	Sewer.....	485.00
Do.....	Gutters on dormitories.....	1,199.00
Do.....	Painting schoolhouses.....	2,511.00
Cushman (Chehalis).....	Schoolhouse.....	1,430.00
Cushman (Jamestown).....	Water and sewer systems.....	1,033.00
<b>Wisconsin:</b>		
Tomah.....	Ice house.....	1,165.00
Keshena.....	Cattle shed.....	365.00
Do.....	Pump house.....	615.00
Do.....	Horse barn.....	4,600.00
Hayward.....	Dairy barn.....	3,200.00
<b>Wyoming:</b>		
Shoshone.....	Heating plant.....	1,000.00
Do.....	Coal sheds.....	490.00
Do.....	Steel bridge.....	3,750.00

TABLE 34.—Buildings, etc., under construction or contract during fiscal year ended June 30, 1918.

State and superintendencies.	Improvement.	Amount of authority granted up to July 1, 1918.
Total.....		\$406,104.41
Arizona:		
Fort Apache.....	Boys' dormitory.....	32,903.91
Camp Verde.....	Water and sewer systems.....	3,500.00
San Xavier (Vamori and Santa Rosa).....	Outhouses.....	805.99
Do.....	Repairs to buildings.....	1,526.40
Colorado River.....	Employees' quarters.....	5,674.25
Navajo.....	Addition to water system.....	16,000.00
California: Fort Yuma.....	Water system.....	1,463.34
Colorado:		
Southern Ute.....	Electric lighting plant.....	4,398.00
Do.....	Employees' cottage.....	5,000.00
Do.....	Addition to power house.....	2,260.66
Ute Mountain.....	Two cottages.....	
Do.....	Schoolhouse.....	
Do.....	Mess hall.....	49,833.78
Do.....	Power house and laundry.....	
Do.....	Water and sewer systems.....	
Do.....	Timber truss bridge.....	10,000.00
Idaho:		
Fort Lapwai.....	Employees' cottage.....	3,566.00
Do.....	Heating plant for cottage.....	633.55
Minnesota:		
Leech Lake.....	Repairing cottages.....	1,397.56
Red Lake (Cross Lake).....	Laundry.....	5,311.54
Michigan: Mount Pleasant.....	Barn, dairy.....	5,000.00
Montana:		
Fort Belknap.....	Flour mill.....	3,036.55
Do.....	Repairing dairy barn.....	1,400.00
Fort Belknap (Lodgepole).....	Schoolhouse and cottage.....	3,516.00
Tongue River.....	Dairy barn.....	2,800.00
Nebraska: Genoa.....	Two employees' cottages.....	5,251.40
Nevada: Western Shoshone.....	Day schools 1 and 2.....	4,000.00
New Mexico:		
San Juan.....	Repairs to hospital.....	600.00
Do.....	One steel bridge.....	25,172.00
Navajo (Tohatchi).....	Frame dormitory.....	46,600.00
Do.....	Remodeling old dormitory.....	5,119.39
Do.....	Repairs to school buildings.....	5,490.00
Pueblo Bonito.....	Addition to power house and boiler setting.....	2,817.00
Zuni.....	Flour mill.....	2,960.00
North Carolina: Cherokee.....	Assembly hall and gymnasium.....	4,000.00
North Dakota:		
Turtle Mountain.....	Improvements to heating plant.....	442.09
Wahpeton.....	Two cottages.....	4,863.70
Do.....	Industrial cottage.....	1,200.00
Oklahoma:		
Kiowa.....	Lavatory annexes.....	2,200.00
Bloomfield.....	Laundry and heating plant.....	19,938.00
Tishomingo.....	Two dormitories.....	54,800.00
Ponca.....	Salt Fork Bridge.....	5,986.57
Shawnee.....	Heating plant.....	2,072.00
Cherokee O. T. School.....	Lavatory annex, girls' dormitory.....	4,403.99
Euchee.....	Dining hall.....	1,365.00
Oregon:		
Balem.....	Addition to hospital.....	3,728.71
Klamath.....	Office building.....	4,319.83
Umatilla (Tutuilla).....	Day school and outhouses.....	4,351.30
South Dakota:		
Flandreau.....	Water tank.....	1,213.17
Do.....	Improvements to water system.....	1,091.35
Pierre.....	Silo.....	520.60
Rosebud.....	Repairs to day schools.....	1,398.49
Do.....	Office.....	750.59
Do.....	Lavatory annexes.....	4,727.84
Pine Ridge.....	Remodeling schoolhouse.....	2,700.00
Wisconsin:		
Lac du Flambeau.....	Employees' quarters No. 112.....	9,780.00
Do.....	Cottage No. 113.....	2,529.52
Wyoming: Shoshone.....	Hospital.....	5,757.25

TABLE 35.—Number and value of individual and tribal live stock, poultry, etc., belonging to Indians, and value of stock purchased, sold, and slaughtered, fiscal year ended June 30, 1918.

States and superintendences.	Value.		Number of stock on reservation.					Stock purchased current year.					Value of stock.	
	All stock.	Other stock (horses, swine, poultry).	Horses and mules.	Mares and jacks.	Cattle.			Total value.	Value mules and horses.	Number stallions and jacks.	Number cows and heifers.	Number bulls.	Sold. <sup>1</sup>	Slaughtered.
					Cows and heifers.	Steers.	Bulls.							
Total, 1918.	\$27,401,101	\$248,808	154,119	92,389	5,039,235,201	86,543	7,899	\$387,255	\$9,408	12	1,919	455	\$3,996,441	\$1,137,553
1917.	32,944,640	447,066	156,021	88,074	5,172,217,693	82,550	6,708	688,117	30,066	20	5,239	684	3,324,318	1,187,512
1916.	28,824,439	487,816	174,728	87,344	5,383,202,794	67,502	6,483	634,445	57,985	43	7,439	724	2,583,069	1,003,170
1915.	27,166,223	442,059	213,528	47,319	9,433,187,008	68,948	6,055	2,091,883	48,575	72	15,804	1,194	2,114,023	1,196,733
1914.	24,462,494	480,282	215,618	45,058	10,772,186,995	64,831	4,716	1,940,918	48,575	299	17,069	1,018	1,569,633	571,924
1913.	22,777,075	480,282	438,048	233,586	25,264,160,127	63,392	4,685	1,790,991	32,274	3,451			1,783,950	535,774
1912.	22,238,242	( <sup>2</sup> )	531,123	( <sup>3</sup> )	265,114	( <sup>4</sup> )	( <sup>5</sup> )	1,789,287					1,571,766	490,808
1911.	17,971,249	( <sup>6</sup> )	530,000	( <sup>7</sup> )	299,321	( <sup>8</sup> )	( <sup>9</sup> )	1,219,157						
1900.	8,187,818		553,387	( <sup>10</sup> )	267,610	( <sup>11</sup> )	( <sup>12</sup> )	575,710						
1890.	6,384,441		443,244	( <sup>13</sup> )	170,419	( <sup>14</sup> )	( <sup>15</sup> )	994,759						
Arizona.	7,997,452	59,396	57,521	17,412	2,339	51,402	21,553	2,106	987,205	4	310	4	1,282,442	751,741
Camp Verde.	1,800	500	35	20									290	
Colorado River.	101,256	1,386	271	267	45	1,102	144	26	5				1,500	1,200
Fort Apache.	514,900	16,000	3,050	3,000	7	9,000	1,500	400					21,340	3,750
Tribal.	41,483					500		120					725	595
Havasupai.	8,868	118	337	275	3	78	6	5	200	3			738	40
Kalab.	4,350	10	25	10			17							
Tribal.	18,496				265	50	22							
Leupp.	913,250	3,750	2,350	2,000	( <sup>16</sup> )	1,000	600	35	155,000				20,800	16,000
Moqui.	910,000	5,150	4,150	2,000	132	2,100	5,000	100	112,000				35,948	95,000
Navajo.	3,132,252	4,232	26,690	( <sup>17</sup> )	880	13,781	( <sup>18</sup> )	650	620,000				918,000	550,000
Pima.	415,975	1,725	2,350	2,300	597	5,900	3,400	150					24,080	1,880
Salt River.	62,735	16,295	7,700	650	48	565	3,600	12	12,150	1	250		14,116	1,460
Tribal.	14,028				236									
San Carlos.	167,740	1,900	2,630	900		1,848	444	14	200				18,517	2,250
Tribal.	180,529			42	2,823	1,229	210						215,235	45,000
San Xavier.	730,567	6,447	8,360	( <sup>19</sup> )	122	8,200	6,400	100						
Truxton Canon.	19,435			( <sup>20</sup> )	283	83								
Tribal.	79,175		243		994	520	67							
Western Navajo.	680,608	1,905	6,300	6,000	500	2,000	110	200,000	4,470	450	60	4	11,206	33,606

<sup>1</sup> Includes 864 steer calves.  
<sup>2</sup> 1917 report, except last two items.

<sup>3</sup> Included with horses and mules.  
<sup>4</sup> Included with cows and heifers.  
<sup>5</sup> Former report.

<sup>6</sup> Includes some tribal stock also.  
<sup>7</sup> Includes tribal stock valued at \$2,965,889.  
<sup>8</sup> Unknown.

TABLE 35.—Number and value of individual and tribal live stock, poultry, etc., belonging to Indians, and value of stock purchased, sold, and slaughtered, fiscal year ended June 30, 1918—Continued.

States and superintendencies.	Value.		Number of stock on reservation.					Stock purchased current year.					Value of stock.		
	All stock.	Other stock (burros, swine, poultry).	Horses and mules.	Mares.	Stallions and jacks.	Cattle.	Sheep and goats.	Total value.	Value mares, colts, and jacks.	Number horses, mares, and mules.	Number stallions and jacks.	Number cows and heifers.	Sold.	Slaughtered.	
California.....	\$593,226	\$59,567	2,690	2,117	21	3,127	896	123	1,692	\$2,746	\$400	\$16.....	32.....	\$65,945	\$9,339
Bishop.....	65,060	3,710	725	350	.....	125	15	1	1,260	1,486	400	6	22	4,823	.....
Campo.....	29,971	2,896	41	57	7	176	105	12	.....	.....	.....	.....	.....	.....	.....
Digger.....	575	75	12	.....	.....	34	.....	.....	.....	325	.....	4	.....	138	78
Fort Bidwell.....	14,300	1,510	250	120	.....	40	5	3	.....	.....	.....	.....	2	1,750	250
Fort Yuma.....	47,320	12,595	12	200	.....	100	.....	.....	.....	.....	.....	.....	.....	8,132	.....
Greenville.....	41,050	3,550	230	175	.....	100	.....	.....	.....	.....	.....	.....	.....	11,950	1,600
Hoopa Valley.....	46,150	5,400	190	150	1	200	200	20	.....	395	.....	2	1	9,720	965
Malik.....	39,041	2,573	177	198	3	479	75	5	.....	.....	.....	.....	.....	10,107	2,023
Pala.....	63,330	6,995	348	243	.....	253	125	9	.....	.....	.....	.....	.....	9,150	.....
Round Valley.....	101,583	11,288	90	70	.....	1,242	102	6	.....	.....	.....	.....	.....	.....	.....
Tribal.....	12,565	.....	.....	344	.....	95	36	38	.....	.....	.....	.....	.....	.....	.....
Soboba.....	87,791	7,185	315	344	.....	843	173	21	22	540	.....	4	7	4,810	4,123
Tule River.....	44,460	1,800	310	210	10	540	60	8	410	.....	.....	.....	.....	5,365	320
Colorado.....	185,279	6,999	975	.....	27	1,530	600	87	5,350	2,530	.....	12	13	3,810	535
Southern Ute.....	51,179	699	475	.....	6	130	.....	3	1,850	2,530	.....	12	* 13	1,120	535
Ute Mountain.....	121,500	.....	1,500	.....	.....	1,400	600	.....	3,500	.....	.....	.....	.....	2,690	.....
Tribal.....	12,600	.....	.....	.....	21	.....	.....	84	.....	.....	.....	.....	.....	.....	.....
Florida: Seminole.....	11,975	6,300	25	10	.....	.....	20	.....	300	.....	.....	.....	.....	.....	1,050
Idaho.....	790,663	22,336	3,892	2,262	76	7,546	1,511	183	100	12,427	539	63	44	120,463	20,230
Coeur d'Alene.....	124,700	12,875	* 1,130	.....	12	1,000	110	19	.....	6,412	.....	23	29	39,805	17,825
Fort Hall.....	269,128	4,896	1,500	1,800	40	4,400	1,025	45	.....	.....	.....	.....	.....	80,658	2,405
Tribal.....	96,335	.....	.....	.....	.....	1,100	121	109	.....	.....	.....	.....	.....	.....	.....
Fort Lapwai.....	200,450	4,635	1,262	462	24	1,046	255	10	100	6,015	539	40	15	1	.....
Iowa: Sac and Fox.....	10,200	1,200	100	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	600	560
Kansas.....	465,920	119,375	972	353	8	1,039	354	30	.....	3,595	125	29	3	66,600	7,670
Kickapoo.....	305,663	94,823	672	153	1	806	9	24	.....	1,450	125	9	.....	66,600	7,670
Potawatomi.....	157,227	24,552	300	200	7	233	345	6	.....	2,145	.....	10	3	.....	.....
Michigan: Mackinac.....	17,955	2,006	46	.....	.....	80	.....	.....	.....	.....	.....	.....	.....	.....	.....

	432, 013	68, 144	920	1, 150	35	1, 787	450	194	507	9, 153	(10)	5	7	25, 200	10, 137
Minnesota.....															
Fond du Lac.....	36, 083	4, 010	34	82		97		3							
Grand Portage.....	37, 890	1, 418	160	140	15	15	10	11		475			1		
Green Lake.....	3, 086	200	12	31		3				340			2		
Nottawake.....	2, 901	542	14	7											
Pistons (Birch Cooley).....	183, 884	19, 944	268	483	4	485	190	79	351	8, 338	100			25, 200	10, 137
Red Lake.....	192, 300	31, 750	410	420	16	1, 100	250	80	185						
White Earth.....	9, 068, 994	48, 485	19, 874	18, 124	470	87, 898	29, 009	1, 457	6, 250	86, 369	20	210	4	86	329
Montana.....														711, 835	14, 988
Blackfoot.....	4, 603, 628		8, 000	5, 000	75	35, 000	20, 000	400	3, 060	5, 000				50	372, 000
Tribal.....	387, 205		42			4, 831	781	169							
Crow.....	714, 350	4, 070	3, 000	2, 500	107	3, 280	1, 200	548		61, 322	150			255	45, 725
Tribal.....	873, 632					19, 000	2, 603							183, 536	4, 100
Flathead.....	994, 300	26, 000	3, 010	1, 400	100	5, 500	1, 200	110	3, 200						
Tribal.....	2, 200														
Fort Belknap.....	422, 795	5, 396	2, 003	2, 800	40	2, 000	1, 000	45		1, 500				32, 500	2, 490
Tribal.....	145, 555					12, 478		84							
Fort Peck.....	373, 400	10, 400	2, 000	2, 300	40	2, 000	400	50		2, 500	10			38, 550	4, 190
Rocky Boy's Agency.....	11, 722	162	118	124	22	6				2, 242	10		18	1, 500	184
Tongue River.....	477, 575	2, 458	1, 701	4, 000	70	3, 000	1, 700	6		13, 795	20		68	82, 964	3, 062
Tribal.....	92, 205					1, 315	125	47							
Nebraska.....	317, 365	113, 940	1, 210	650	2	260		9						8, 508	4, 410
Omaha.....	229, 330	104, 050	710	550	2	160		8						8, 508	4, 410
Winnabago.....	678, 015	9, 890	500	100		100		1						24, 120	4, 359
Nevada.....	354, 952	11, 112	4, 413	726	7	2, 529	756	67		200					
Fallon.....	11, 948	1, 498	89	107		21				200				1, 081	99
Fort McDermitt.....	9, 040	40	200	(7)		6									
Moapa River.....	4, 900	400	70	30										225	195
Nevada.....	18, 415	120	281	(7)		263								1, 150	550
Walker River.....	37, 815	3, 720	183	154		401	71							5, 066	48
Tribal.....	37, 300					1, 674		30							
Western Shoshone.....	193, 334	1, 034	500	400	7	1, 439	511							16, 607	3, 500
Tribal.....	6, 900			5				37							
Reno Special Agent.....	35, 300	4, 300	3, 000			25								(*)	(*)
New Mexico.....	4, 765, 314	18, 134	18, 050	15, 850	979	17, 728	4, 583	715	470, 659	6, 683	2, 000	17		20	396, 188
Jicarilla.....	132, 060	340	1, 503	(7)	50	435	80	6	8, 400	2, 063	2, 000	1		18, 325	2, 450
Tribal.....	192, 028	230	21			1, 122	361	77	9, 914						
Mescalero.....	120, 625	575	675	1, 400	47	500	25	9	7, 150	4, 200		12		20	18, 370
Tribal.....	158, 775		48	(7)	10	2, 050	550	86							
Pueblo Bonito.....	836, 500		3, 100	3, 000	200	2, 000	360	100	137, 000						
Pueblo day schools.....	1, 262, 745	8, 413	3, 263	3, 000	89	5, 919	1, 087	307	81, 995	150		2		112, 338	30, 020
San Juan.....	1, 574, 000	3, 000	9, 000	8, 000	550	5, 000	2, 000	80	185, 000					177, 375	49, 500
Tribal.....	3, 600								200						
Zuni.....	454, 960	5, 580	440	450	33	700	150	50	47, 000	250		2		71, 750	67, 150

\* 1917 report, except last two items.

Included with horses and mules. Not reported.

\* Includes steers and calves. \* As reported.

\* Includes calves. \* 1917 report.

\* Includes calves. \* Includes mares.

TABLE 35.—Number and value of individual and tribal live stock, poultry, etc., belonging to Indians, and value of stock purchased, sold, and slaughtered, fiscal year ended June 30, 1918—Continued.

States and superintendencies.	Value.		Number of stock on reservation.						Stock purchased current year.					Value of stock.			
	All stock.	Other stock (horses, swine, poultry).	Horses and mules.	Mares.	Stallions and jacks.	Cattle.			Sheep and goats.	Total value.	Value miscellaneous and mules.	Number horses, stallions and jacks.	Number cows and heifers.	Number bulls.	Sold.	Slaughtered.	
North Carolina: Cherokee....	81,675	14,125	100	25	.....	600	300	20	125	.....	.....	.....	.....	.....	.....	16,375	.....
North Dakota.....	1,711,838	10,578	7,287	2,817	70	9,565	3,392	257	352	.....	13,292	118	48	1	126	177,780	21,180
Fort Berthold.....	622,060	2,400	4,008	(1)	12	2,250	1,750	52	2	.....	4,538	118	30	18	.....	142,650	400
Fort Totten.....	59,356	1,211	250	250	20	25	.....	20	.....	.....	8,304	18	118	.....	.....	1,750	400
Standing Rock.....	781,517	2,062	2,177	2,117	30	5,390	1,412	150	.....	.....	8,304	18	118	.....	.....	33,380	20,780
Tribal.....	28,500	.....	.....	.....	30	.....	.....	.....	.....	.....	350	.....	1	.....	.....	(*)	(*)
Turtle Mountain.....	220,405	4,905	852	450	8	900	230	35	350	.....	350	.....	.....	.....	.....	(*)	(*)
Oklahoma.....	1,812,166	114,280	5,280	2,046	37	6,570	4,818	196	541	254	44,523	190	254	89	19	293,358	41,338
Cantonment.....	82,150	2,000	460	280	10	60	15	7	10	49	7,133	100	49	1	.....	1,650	350
Cheyenne and Arapaho.....	189,739	6,406	1,057	307	12	261	100	14	.....	89	16,750	10	89	22	1	.....	.....
Kiowa.....	4150,000	(*)	(*)	(*)	(*)	4,000	4,500	150	420	10	5,200	.....	10	40	18	235,750	36,900
Osage.....	839,850	48,500	900	500	7	.....	.....	.....	.....	.....	5,200	.....	.....	.....	.....	235,750	36,900
Otoe.....	77,355	1,992	360	175	.....	82	7	.....	1	.....	1,875	.....	12	24	.....	1,503	.....
Pawnee.....	39,888	3,850	164	110	1	109	.....	4	.....	33	1,875	.....	12	.....	.....	.....	.....
Ponca.....	66,640	5,950	472	135	.....	224	100	33	.....	2	4,100	10	33	3	.....	7,684	255
Sac and Fox.....	55,509	7,257	264	33	.....	209	32	5	6	37	620	70	37	27	.....	2,060	1,580
Sage.....	70,817	1,377	363	232	.....	59	.....	.....	100	22	5,575	.....	.....	.....	.....	43,100	750
Seneca.....	185,505	27,055	780	30	7	880	23	3	4	.....	4,250	.....	22	.....	.....	2,970	.....
Shawnee.....	81,632	9,903	560	244	.....	686	41	13	.....	8	4,250	.....	.....	402	.....	132,018	9,200
Oregon.....	1,286,561	22,674	4,920	1,458	152	12,086	2,023	134	505	.....	20,218	.....	8	402	.....	83,000	.....
Klamath.....	921,770	2,420	2,050	500	34	11,350	1,600	10	.....	8	20,218	.....	.....	402	.....	.....	.....
Tribal.....	9,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Siletz.....	19,972	1,692	70	28	.....	134	23	5	505	.....	.....	.....	.....	.....	.....	32,375	8,400
Umatilla.....	269,020	17,260	1,650	930	50	200	.....	19	.....	.....	.....	.....	.....	.....	.....	(*)	(*)
Warm Springs.....	71,132	1,232	1,150	(1)	64	400	400	23	.....	.....	.....	.....	.....	.....	.....	16,643	.....
Tribal.....	5,667	.....	.....	.....	14	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....

South Dakota	4,439,689	80,835	15,073	22,332	473	26,964	9,438	1,041	2,083	63,509	3,209	384	5	200	5	470,592	48,630
Cheyenne River	611,832	7,177	4,784	6,807	84	4,720	1,009	64	2,120	4,444		28		20		70,150	4,250
Tribal	67,109	1,040	62	18	12	215	3	98	1,092							(*)	(*)
Crow Creek	323,357	6,400	1,200	1,600	20	1,600	800	16								850	525
Piandreu	9,800	25	22		20	20	3									11,410	680
Lower Brule	323,573	26,353	614	1,140	12	1,601	700	10		5,386	480	43		5			
Tribal	36,868				15	*871	73	39									
Pine Ridge	1,413,317	16,352	7,654	6,765	184	11,654	4,625	1,069	249	13,863	208	53	2	37	1	314,782	15,073
Tribal	10,550	7						51									
Rosebud	1,144,304	5,019	4,221	4,574	104	5,765	2,314	185		31,450	660	222	3	132	2	86,240	28,075
Tribal	19,200				12			152								14,150	
Siasseton	198,777	4,787	224	429	4	315	30	20	274								
Yankton	320,163	10,918	579	1,000	16	713	80	18	248	8,361	1,871	40	6	2			
Utah	760,391	5,131	267	771	59	6,020	550	162	3,511	51,823	630	96	1	479	37	16,260	2,150
Goehute	11,825	275	127	10	2	20	50	2									
Shilwits	5,265	65	60	11						530		4					
Umatin and Ouray	733,301	4,791	180	750	57	6,000	600	160	3,511	51,283	630	92	1	479	37	16,260	2,150
Washington	900,475	42,941	3,401	1,844	136	7,392	2,035	210	6,319	15,304	92	74	1	21	40	135,810	19,478
Colville	563,897	27,002	1,146	1,426	88	4,774	1,643	121		4,185					39	114,520	16,944
Tribal	21,700					1,325	90	9									
Cushman	23,742	1,792	186	64	2	136	25	3								5,369	685
Neah Bay	12,570	150	62	46	2	145										1,036	80
Spokane	40,677	737	229	135	14	340	17	10								2,980	1,230
Tribal	2,000																
Taholah	8,806	330	25	100	1	50	10	2									
Tulalip	95,304	12,730	219	140	2	656	50	34	1,319	1,722	67	4		*17	1	11,955	660
Yakima	131,780	200	1,431	8	27	1,113	200	31	5,000	9,397	25	70	1	4		(*)	(*)
Wisconsin	480,491	28,917	1,973	1,013	17	1,878	80	26	58	31,762	1,367	182		105		15,478	10,092
Grand Rapids	74,389	2,364	300	325	2	15	6	2		7,190	810	55		8		(*)	(*)
Hayward	27,200	2,890	150	150		240		10		6,750		6				1,600	575
Keweenaw	65,945	6,940	*478	138		*945	24	2	66			*22		*15		4,358	3,882
Lesau du Flambeau	17,249	1,350	66	63	3	29		4		843	13						
Lacota	36,700	1,000	66	130	12	150				6,200	119	*29		20			
La Pointe	80,665	8,425	60	147			50	8		8,560	250	25		40		9,500	5,695
Ojibwa	138,660	6,040	816	(*)		1,010											
Red Cliff	11,573	958	20	12		*49			2	2,579	144	3		*22			
Wyoming	868,116	2,320	1,225	1,300	131	8,902	3,705	292	200	6,247	96	44		2		31,100	2,650
Shoshone	477,570	2,320	*1,202	1,300	110	4,500	1,200	90	290	6,247	96	44		*2		31,100	2,650
Tribal	420,546	25	25		21	4,402	2,506	172									

\* Includes ponies.  
\*\* Includes colts.

\* Ponies not included.  
\*\* No record.

\* Includes steers.  
\*\* 1917 report.

\* Not reported.  
\*\* As reported.

\* Included with horses.  
\*\* Includes calves.



TABLE 36.—*Distribution of Government property valuations June 30, 1918.*

States and superintendencies.	Total value.	General administration.	Health.	Allotting.	Irrigation.	Farming.	Forestry.	School.
Grand total.....	\$40,160,810	\$3,357,364	\$1,532,469	\$38,887	\$17,334,084	\$1,789,737	\$1,120,679	\$15,036,690
Arizona.....	3,039,075	313,316	235,459	22,675	19,565	181,982	34,020	2,232,053
Camp Verde.....	52,270	37,120	325					14,825
Colorado River.....	107,767	10,849	2,759			12,407		81,752
Fort Apache.....	376,911	68,757	11,870				19,549	276,735
Fort Mojave.....	115,154	1,050	6,847			12,084		95,173
Havasupia.....	7,610	2,755	240			1,560		3,055
Kaibab.....	6,840	1,882	70					4,888
Leupp.....	110,366	15,160	7,440		1,465	6,111		80,190
Moqui.....	175,900	24,000	29,000			5,900		117,000
Navajo <sup>1</sup> .....	474,610	42,075	48,000			8,500	2,621	373,414
Phoenix.....	737,234		81,612					655,722
Pima <sup>1</sup> .....	243,068	3,437	19,075	350	12,555	91,882		115,767
Rice Station.....	119,623		4,825					114,798
Salt River.....	41,835	18,848	635					22,352
San Carlos.....	146,012	77,730	5,350	22,325			11,850	28,757
San Xavier.....	53,798	4,473	3,377			11,868		34,690
Truxton Canon.....	122,288		7,894		5,545			108,849
Western Navajo.....	147,791	5,180	6,140			31,670		104,801
California.....	1,051,261	43,945	48,825	125	42,561	79,180	5,408	531,217
Bishop.....	32,439	760	100	125		440		31,014
Campo.....	11,968	2,285	200			1,200		8,283
Digger.....	10,785							10,785
Fort Bidwell.....	81,814	650						81,164
Fort Yuma.....	107,944	2,400						105,544
Greenville.....	78,943		5,105					73,833
Hoopa Valley.....	90,514	5,025	16,475			6,075	2,275	60,664
Maidu.....	16,189	12,959	110		1,000			2,120
Pala.....	70,804	12,860	1,620		41,486	4,260		10,575
Round Valley.....	88,177	3,850	550			500	2,905	80,372
Sherman Institute.....	404,049		24,365			63,432		316,252
Soboba.....	41,669	1,250	300			3,273		37,146
Tule River.....	15,606	1,906					228	13,457
Colorado.....	110,512	35,141	1,139		2,140	13,790		58,302
Southern Ute.....	74,690	21,455			2,140			51,065
Ute Mountain <sup>1</sup> .....	35,822	13,686	1,139			13,790		7,207
Idaho.....	481,559	93,903	99,618		25,690	34,853	2,094	225,501
Coeur d'Alene.....	65,014	50,832	1,620			980	1,094	10,438
Fort Hall.....	281,453	43,071	12,001		25,690	26,887		173,904
Fort Lapwai.....	135,092		85,997			6,986	1,000	41,109
Iowa: Sac and Fox.....	90,168		83,840					6,328
Kansas.....	630,943	9,550	25,315			138,111		457,967
Haskell Institute.....	532,043		25,038			130,675		376,330
Kickapoo.....	84,478		277			7,436		76,765
Potawatomi.....	14,422	9,550						4,872
Michigan.....	240,597	310	11,515					228,772
Mackinac <sup>1</sup> .....	2,385	310						2,075
Mount Pleasant.....	288,212		11,515					226,697
Minnesota.....	861,030	134,257	89,844			8,016	33,256	585,657
Cass Lake.....	15,660							15,660
Fond du Lac.....	37,039	7,525	25,124			80		4,310
Grand Portage <sup>1</sup> .....	9,482	9,132					350	
Leech Lake.....	118,648	42,276	6,732					69,640
Nett Lake.....	38,758	4,200	275				271	34,012
Pipestone.....	169,080		6,040					163,040
Red Lake.....	169,369	23,704	25,029			7,936	8,635	104,065
Vermillion Lake.....	81,470						24,000	57,470
White Earth.....	221,524	47,420	26,644					147,460

<sup>1</sup> 1917 report.<sup>2</sup> Decreased valuation.

TABLE 36.—Distribution of Government property valuations June 30, 1918—Continued.

States and superintendencies.	Total value.	General administration.	Health.	Allotting.	Irrigation.	Farming.	Forestry.	School.
Montana.....	\$1,445,143	\$369,722	\$67,168	\$740	\$248,255	\$138,360	\$18,900	\$601,998
Blackfeet.....	180,432	39,994	23,416			6,555		110,467
Crow.....	278,128	100,316	20,850			45,700	475	110,787
Flathead.....	351,321	83,978	1,480		246,755	6,509	12,025	574
Fort Belknap.....	344,142	65,045	3,300			42,700	3,000	230,097
Fort Peck.....	155,153	50,840	15,310	740		12,985		75,278
Rocky Boy's Agency.....	9,722	5,305	112			3,005		1,300
Tongue River.....	126,245	24,244	2,700		1,500	20,906	3,400	73,495
Nebraska.....	538,403	74,920	36,248			31,930		395,305
Genoa.....	394,180	10,875						383,305
Omaha.....	38,480	6,550				31,930		
Santee.....								12,000
Winnebago.....	105,743	57,495	36,248					
Nevada.....	417,537	87,419	44,164	25	4,310	66,386		215,233
Carson.....	140,626	1,796	21,297			37,363		80,170
Fallon.....	17,098							17,098
Fort McDermitt.....	17,342	3,835	850	25		3,533		9,099
Moapa River.....	7,574	1,210	100		110			6,154
Nevada.....	82,160	8,700						73,460
Walker River.....	26,954	6,875	1,565		4,200	7,267		7,047
Western Shoshone.....	97,634	36,953	20,276			18,223		22,182
Reno, special agent.....	28,149	28,060	76					28
New Mexico.....	1,657,159	80,524	111,878	250	11,475	95,548	25,170	1,832,314
Albuquerque.....	347,661	9,631	12,044					325,986
Jicarilla.....	168,863	35,295	21,974			20,095	11,070	80,429
Mescalero.....	161,903	24,998	21,700			11,150	10,660	93,405
Pueblo Bonito.....	145,967		1,300	250		9,040		135,377
Pueblo day schools.....	139,554	1,600	16,274			12,168		109,512
San Juan.....	304,345	8,750	28,190			16,970	8,300	249,135
Santa Fe.....	237,283		3,108					234,175
Zuni.....	151,583	260	9,288		11,475	26,125	150	104,286
New York: New York Agency.....	710	135	575					
North Carolina: Cherokee.....	145,377						4,000	141,377
North Dakota.....	1,094,592	177,155	77,470		313	111,034		728,620
Bismarck.....	84,361							84,361
Fort Berthold.....	118,378	54,695	2,125			53,300		7,945
Fort Totten.....	229,911	7,729	6,611		313	4,010		211,561
Standing Rock.....	342,139	60,302	31,775			48,108		192,954
Turtle Mountain.....	92,653	39,556	16,844			5,616		30,637
Wahpeton.....	227,150	5,873	20,115					201,162
Oklahoma.....	3,440,734	192,719	167,685	1,005		239,808		2,839,517
Cantonment.....	140,649	6,000	740	75		59,200		74,684
Cheyenne and Arapaho.....	413,297	23,439	20,803			87,984		281,071
Chilocco.....	860,745							860,745
Choctaw- Chickasaw Sanatorium.....	73,554		73,554					
Kiowa.....	603,344	42,950	60,825			77,324		422,245
Osage.....	221,833	40,740	1,240			1,200		178,653
Otoe.....	63,808							63,808
Pawnee.....	126,940	23,323	716					102,901
Ponca.....	83,109	21,896	250					60,963
Sac and Fox.....	54,743	12,762	1,170					40,811
Seger.....	174,731	15,299	7,005	930				151,497
Seneca.....	23,245							23,245
Shawnee.....	113,698	6,310						107,388
Total.....	2,953,696	192,719	166,303	1,005		225,708		2,367,961

<sup>1</sup> As reported.

<sup>2</sup> Santee included under Yankton, S. Dak.

<sup>3</sup> 1917 report.

TABLE 36.—*Distribution of Government property valuations June 30, 1918—Continued.*

States and superintendencies.	Total value.	General adminis- tration.	Health.	Allot- ting.	Irriga- tion.	Farm- ing.	Fores- try.	School.
Oklahoma—Contd. Five Civilized Tribes schools..	\$487,038		\$1,382			\$14,100		\$471,556
Armstrong Academy..	55,617							55,617
Bloomfield Seminary..	45,435							45,435
Cherokee Or- phan School	68,633							68,633
E u c h e e Boarding School.....	52,025					10,600		41,425
E u f a u l a Boarding School.....	49,135		968			3,500		44,667
Jones Male Academy..	33,874							33,874
Mekus u k e y Academy..	61,414		350					61,064
N u y a k a Boarding School.....	42,940		64					42,876
T u s k a h o m a Academy..	39,855							39,855
W h e e l o c k Academy..	38,110							38,110
Oregon.....	821,525	\$23,978	7,048	\$30	\$12,707	101,274	\$38,240	638,248
Klamath <sup>1</sup> .....	163,240	6,775	2,440		9,319	11,735	26,260	107,711
Roseburg <sup>1</sup> .....	2,280	2,200		30			50	
Salem.....	391,810							391,810
Siletz.....	18,956	7,883	1,888				500	8,085
Umatilla.....	146,254	3,145			3,888	86,589	580	52,662
Warm Springs..	98,985	3,976	2,720			3,000	11,850	77,440
Pennsylvania: Car- lisle.....	559,767		27,525			91,592		440,650
South Dakota.....	3,068,915	674,372	297,181	5,058	27,440	310,046	189,132	1,565,691
Canton Asylum..	139,974		139,974					
Cheyenne River..	454,284	228,332	44,328	4,398		48,309		128,917
Crow Creek.....	130,297	30,946	17,571	225		18,000		63,555
Flandreau.....	306,710	7,750	4,625			56,164		238,171
Lower Brule.....	119,004	52,212	6,017			8,850		51,925
Pierre.....	290,973		6,902		26,500	55,563		202,008
Pine Ridge.....	703,537	196,800	21,547	430		30,660	* 189,067	265,043
Rapid City.....	283,575	4,390	5,145			66,195		187,845
Rosebud.....	444,868	99,933	48,100		940	24,860	75	270,960
Siisseton.....	81,272	19,361	450					61,461
Springfield.....	36,991							36,991
Yankton.....	97,430	34,648	2,522			1,445		58,815
Utah.....	218,758	123,484	6,710		47,967		4,360	36,237
Goshute.....	7,260							7,260
Shivwits.....	12,770	485	200					12,085
Uintah and Ouray <sup>2</sup> .....	198,728	122,999	6,510		47,967		4,360	16,892
Washington.....	1,492,508	653,951	60,170			67,249	51,909	659,229
Colville.....	189,292	70,764	5,193			58,639	34,334	20,372
Cushman.....	364,956	110	11,000					353,846
Neah Bay.....	12,251	7,551						4,700
Spokane.....	578,921	* 521,832	33,554				6,850	16,685
Taholah.....	20,810	800	800				725	18,485
Tulalip.....	210,954	27,304	6,600				1,965	175,055
Yakima.....	115,324	26,600	3,023			8,610	8,006	70,086

<sup>1</sup> 1917 report.<sup>2</sup> Includes forest reserve.<sup>3</sup> Increase last year due to supplies on hand.<sup>4</sup> Includes value land and old Spokane Sanatorium.

TABLE 36.—*Distribution of Government property valuations June 30, 1918—Continued.*

States and superintendencies.	Total value.	General adminis- tration.	Health.	Allot- ting.	Irriga- tion.	Farm- ing.	Fore- stry.	School.
Wisconsin.....	\$1,410,351	\$47,646	\$26,227	.....	\$600	\$24,928	\$665,690	\$615,260
Hayward.....	164,289	2,221	5,640	.....	.....	18,550	50	137,828
Keshena.....	873,834	35,082	11,717	.....	.....	4,138	665,290	127,627
Lac du Flambeau	91,464	805	1,370	.....	.....	.....	.....	89,290
Leona.....	1,075	715	360	.....	.....	.....	.....	.....
La Pointe.....	9,553	8,408	350	.....	600	150	50	.....
Onesida.....	72,671	.....	1,460	.....	.....	.....	.....	71,211
Red Cliff.....	3,670	440	520	.....	.....	2,090	800	320
Tomah.....	198,795	.....	4,810	.....	.....	.....	.....	188,985
Wyoming: Shoshone..	428,155	154,153	6,865	.....	51,778	5,650	18,500	191,200
State totals.....	23,244,779	3,290,600	1,532,469	\$29,903	494,701	1,739,737	1,120,679	15,036,690
Miscellaneous.....	16,916,031	66,764	.....	8,984	16,840,283	.....	.....	.....
Warehouses.....	1 2,884	1 2,884	.....	.....	.....	.....	.....	.....
Liquor suppres- sion.....	1 650	1 650	.....	.....	.....	.....	.....	.....
Allotting service..	1 8,984	.....	.....	1 8,984	.....	.....	.....	.....
Irrigation service (cost).....	16,840,283	.....	.....	.....	16,840,283	.....	.....	.....
Indian office.....	63,230	63,230	.....	.....	.....	.....	.....	.....

<sup>1</sup> 1917 report.

TABLE 37.—*Value of Indians' individual and tribal property, June 30, 1918.*

States and superintendencies.	Total individual and tribal property.	Individual.					Tribal.					
		Total.	Lands exclusive of timber.	Timber.	Funds in hands of superintendents.	Homes, furniture, barns, etc.	Wagons, implements, etc.	Stock, poultry and other property.	Total.	Lands exclusive of timber.	Timber and stock.	Balance of funds in treasury.
Total, 1918.												
	\$607,087,704	\$442,626,265	\$353,648,832	\$11,044,615	\$23,020,264	\$13,620,799	\$5,983,848	\$35,302,877	\$224,461,439	\$105,800,231	\$75,986,057	\$42,675,101
1917.	655,612,661	432,225,913	351,398,172	10,937,166	21,011,127	12,040,371	5,561,664	31,277,413	223,286,745	102,724,836	76,428,522	44,133,380
1916.	653,418,462	427,097,647	349,073,600	11,093,545	16,101,825	12,635,814	4,860,244	33,932,619	225,720,815	105,815,540	75,624,227	44,281,048
1915.	658,262,436	438,116,841	368,080,944	11,369,277	12,224,186	10,827,552	4,244,646	31,420,226	220,145,565	101,390,579	76,538,336	42,196,680
1914.	667,454,639	434,872,202	372,776,671	11,373,084	12,231,557	9,924,486	3,769,908	24,776,492	222,582,437	111,396,816	74,083,412	47,082,209
1913.	666,331,263	426,436,766	368,890,835	11,766,623	11,200,525	8,537,204	2,815,071	23,298,965	240,494,497	120,701,799	73,123,987	46,688,701
1912.	648,089,092	404,265,024	348,504,283	11,745,511	10,098,276	8,276,073	2,641,908	22,988,965	244,424,068	137,863,467	72,011,067	44,519,534
1911.	623,134,254	380,934,110	331,429,404	9,106,470	10,735,723	7,796,905	2,232,379	19,633,329	242,200,144	124,942,410	75,413,904	41,843,880
Arizona.												
Camp Verde.	64,994,028	11,992,767	3,317,077	4,000	3,214	282,350	383,385	7,892,731	43,011,261	31,226,768	11,863,771	188,722
Colorado River.	3,300					350	1,150	1,800	6,089,768	4,984,754		55,014
Fort Apache.	5,781,996	742,128	606,500		2,572	25,500	7,300	101,256	9,269,076	6,214,833	3,041,463	13,300
Havasupai.	9,789,776	520,109				1,700	3,500	514,900				
Kalabup.	27,320	12,893				2,960	1,078	8,868	14,427			
Leupp.	130,761	7,000				2,060	600	4,350	123,761	104,059	18,496	1,206
Moqui.	1,743,540	632,200				3,200	15,750	913,250	811,340			
Navajo.	2,833,000	992,000				47,000	20,000	925,000	1,841,000	1,841,000	7,500,000	
Prima.	15,507,753	8,360,894	1,386,900		642	48,000	66,000	3,247,252	12,146,859	4,646,859		
Salt River.	5,881,697	992,175	767,440			56,000	86,000	3,415,975	3,867,722	3,867,722	80,000	
San Carlos.	1,490,956	1,942,775				31,000	49,000	144,735	498,731	494,450	14,028	303
San Xavier.	3,703,555	194,240				20,500	6,000	167,740	3,509,115	2,643,340	783,779	76,996
Truxton Canon.	4,331,318	1,547,804	557,237	4,000		135,000	115,000	736,567	2,783,514	2,783,514		
Western Navajo.	1,124,201	24,735				2,600	2,800	19,435	1,090,466	901,780	155,975	41,711
	2,645,255	709,423				6,600	11,220	691,603	1,935,832	1,935,832		192
California.	10,812,337	6,016,440	3,099,278	1,915,250	91,143	210,923	104,405	596,441	4,796,497	3,822,741	960,951	22,805
Bishop.	354,677	314,677	220,200		917	10,000	8,500	65,060	40,000	40,000		
Campo.	107,904	38,466				5,390	2,500	30,426	69,438			
Digger.	17,995	12,550	9,000	250		2,500	8,125	6,675	25,072	6,235	200	
Fort Bidwell.	229,346	204,274	126,600	40,000	2,574	9,900	8,000	15,300	25,072			
Fort Yuma.	1,740,354	1,076,320	1,004,000			7,000	18,000	47,320	61,034	68,000	4,000	2,034
Greenville.	1,347,781	1,230,601	1,064,200			13,300	5,600	44,000	17,000			
Hoopa Valley.	2,883,400	1,999,390	118,000	1,800,000	71,521	12,000	5,500	46,160	594,010	156,000	426,000	10,010
Malik.	2,837,446	97,251				20,000	25,700	41,621	2,740,595	2,740,595		
Pala.	509,950	244,845	127,600			80,160	14,160	63,355	2,266,013		1,000	

Round Valley.....	944,670	922,205	685,688	75,000	7,854	46,000	6,703	101,593	22,465	320	12,686	9,560
Soboba.....	585,800	130,274	55,997	.....	1,037	26,783	8,450	95,041	428,008	401,450	27,156	1,139
Tule River.....	680,136	55,997	.....	.....	.....	9,000	1,500	44,460	428,139	67,000	496,000	.....
Colorado.....	2,638,880	624,265	226,920	4,000	194,166	15,500	11,000	172,679	2,014,616	612,060	12,600	1,489,965
Southern Ute.....	1,075,037	367,867	226,920	4,000	61,268	13,500	11,000	51,179	707,170	.....	707,170	782,766
Ute Mountain.....	1,563,843	256,398	.....	.....	132,898	2,000	.....	121,500	1,307,445	612,060	12,600	.....
Florida: Seminole.....	123,721	11,975	.....	.....	.....	.....	.....	11,975	111,746	111,746	.....	.....
Idaho.....	15,242,018	12,348,490	10,519,615	214,640	318,957	368,000	208,000	721,278	2,893,628	1,314,341	1,425,046	154,141
Coeur d'Alene.....	2,833,727	2,628,061	1,950,980	179,640	155,741	160,000	45,000	136,700	205,666	59,202	23,661	122,803
Fort Hall.....	6,256,900	3,923,737	3,410,655	.....	17,954	88,000	38,000	369,128	1,333,163	761,614	556,385	15,164
Fort Lapwai.....	7,151,391	5,796,692	5,157,080	35,000	145,262	120,000	123,000	215,450	1,354,699	493,586	845,000	16,174
Iowa: Sac and Fox.....	720,126	40,696	.....	.....	20,296	16,200	3,000	10,200	679,430	333,388	1,800	344,542
Kansas.....	4,270,364	4,051,321	2,870,476	.....	217,241	275,684	122,000	565,920	219,043	.....	.....	219,043
Haskell Institute.....	7,284	7,224	.....	.....	7,224	140,384	97,000	308,698	96,510	.....	.....	96,510
Kickapoo.....	2,278,517	2,182,007	1,535,290	.....	105,640	135,300	80,000	267,227	122,533	.....	.....	122,533
Potawatomi.....	1,984,613	1,862,080	1,333,196	.....	104,367	118,000	28,000	27,955	2,596	.....	.....	2,596
Michigan: Mackinac.....	446,632	444,036	165,556	81,962	27,563	118,000	28,000	27,955	2,596	.....	.....	2,596
Minnesota.....	18,047,596	9,449,806	5,947,441	208,500	900,122	1,645,550	292,000	556,193	8,897,790	1,283,894	990,198	6,323,698
Fond du Lac.....	1,041,543	498,048	305,500	7,600	94,363	45,000	9,000	36,685	545,495	.....	.....	545,495
Grand Portage.....	316,943	90,778	50,000	25,000	15,490	420,000	17,500	288	229,165	38,000	10,000	181,166
Leech Lake.....	2,080,149	1,153,491	507,381	35,000	123,650	12,600	2,000	49,960	906,651	.....	.....	906,651
Nett Lake.....	1,079,919	777,978	625,133	126,000	14,600	6,750	2,000	3,265	301,941	.....	.....	301,941
Pipestone (Birch Cooley).....	64,998	63,452	45,500	.....	7,251	7,800	300	2,601	2,601	.....	.....	1,543
Red Lake.....	8,604,407	382,618	45,500	.....	67,754	91,000	63,000	170,894	3,221,789	1,208,644	945,598	1,057,547
White Earth.....	9,876,647	6,483,441	4,313,927	15,000	867,014	1,075,000	200,000	292,500	3,383,206	37,250	24,900	3,331,356
Montana.....	55,462,651	27,593,804	17,390,092	756,465	730,296	613,124	514,460	7,599,367	27,988,847	18,616,725	7,312,627	2,029,495
Blackfeet.....	11,123,491	7,878,899	3,025,100	.....	359,748	160,174	90,000	4,005,625	3,244,592	2,136,187	1,062,205	46,200
Crow.....	12,751,604	5,651,260	4,355,192	2,000	359,748	120,000	100,000	714,350	7,100,434	5,527,907	898,452	674,075
Flathead.....	12,529,382	5,631,153	3,567,100	675,000	128,753	155,000	110,000	994,300	6,868,229	1,953,092	4,202,200	742,937
Fort Belknap.....	7,101,621	494,063	.....	19,258	28,000	28,000	24,000	422,795	6,868,229	6,269,739	337,565	264
Fort Peck.....	7,764,175	7,208,901	6,342,730	79,465	194,756	144,000	144,000	373,400	556,274	.....	.....	555,274
Rocky Boy's Agency.....	332,917	22,182	.....	.....	5,400	5,400	3,460	13,322	830,735	326,400	.....	4,335
Tongue River.....	3,899,371	617,356	.....	.....	26,781	70,000	43,000	477,575	3,222,015	2,403,400	812,205	6,410

\* Data incomplete.

\* Includes \$2,965,880 tribal stock.

\* Includes interest balances on interest bearing trust funds, and \$3,883,322.66 tribal funds of the Five Civilized Tribes in State and national banks of Oklahoma.

\* Includes tribal stock.

\* 1917 report, except last item.

\* Sundry reservations.

\* Includes timber on Vermillion Lake School.

TABLE 37.—*Value of Indians' individual and tribal property, June 30, 1918—Continued.*

States and superintendencies.	Total Individual and tribal property.	Individual.					Tribal.					
		Total.	Lands exclusive of timber.	Timber.	Funds in hands of banks and in hands of superintendents.	Homes, furniture, barns, etc.	Wagons, implements, etc.	Stock, poultry and other property.	Total.	Lands exclusive of timber.	Timber and stock.	Balance of funds in treasury.
Nebraska.....	\$11,631,664	\$11,219,656	\$9,800,791	.....	\$160,000	\$738,500	\$202,000	\$317,365	\$412,008	\$246,567	.....	\$165,441
Omaha.....	7,617,791	7,239,350	6,000,000	.....	160,000	660,000	180,000	239,350	278,441	225,000	.....	83,441
Winnebago.....	4,113,873	3,980,306	3,800,791	.....	.....	79,500	22,000	78,015	133,567	21,567	.....	112,000
Nevada.....	3,041,952	1,501,008	823,060	88,000	9,601	79,830	275,565	313,952	1,640,944	1,478,445	\$59,200	3,299
Fallon.....	155,528	152,528	128,680	.....	.....	9,000	2,900	11,948	8,000	3,000	.....	.....
Fort McDermitt.....	63,810	55,570	35,530	.....	.....	9,040	7,000	9,040	8,240	8,240	.....	.....
Moapa River.....	161,700	161,700	155,000	.....	.....	850	750	6,100	.....	.....	.....	.....
Nevada.....	702,810	48,310	.....	.....	5,000	5,480	19,415	18,415	654,500	639,500	15,000	.....
Walker River.....	581,716	296,531	342,475	.....	241	11,000	8,000	37,815	182,185	144,885	37,300	.....
Western Shoshone.....	1,126,353	433,334	.....	.....	.....	14,500	222,500	196,334	693,019	682,829	6,900	13,299
Reno, special agent.....	260,035	260,035	161,375	8,000	4,360	26,000	15,000	35,300	.....	.....	.....	.....
New Mexico.....	23,434,215	6,907,771	877,833	1,095,000	30,805	714,800	218,400	3,970,933	16,626,444	11,288,673	5,044,621	193,150
Jicarilla.....	2,143,478	1,560,238	316,833	1,095,000	8,645	11,300	11,400	137,000	563,240	171,441	222,026	169,773
Mescalero.....	5,485,852	186,785	.....	.....	22,160	28,000	16,000	120,625	5,299,067	619,500	4,658,775	20,492
Pueblo Bonito.....	3,273,336	1,397,500	561,000	.....	.....	420,500	98,000	836,500	1,875,836	3,132,135	73,720	336
Pueblo day schools.....	4,968,825	1,791,248	.....	.....	.....	88,000	33,000	1,272,748	3,207,577	4,204,000	67,600	1,722
San Juan.....	5,994,427	1,722,000	.....	.....	.....	88,000	33,000	1,604,000	4,272,427	1,285,797	22,500	837
Zuni.....	1,538,297	230,000	.....	.....	.....	170,000	60,000	.....	1,308,297	.....	.....	.....
New York: New York Agency.....	4,504,365	1,171	.....	.....	1,171	.....	.....	.....	4,503,194	4,442,350	.....	60,844
North Carolina: Cherokee.....	967,116	186,323	.....	.....	23,518	71,980	6,250	84,575	780,793	688,000	192,000	793
North Dakota.....	25,081,946	23,268,136	19,537,850	.....	894,948	697,000	415,000	1,723,338	1,813,810	698,103	26,500	1,067,207
Fort Berthold.....	4,285,369	3,344,371	1,524,353	.....	627,958	265,000	250,000	647,060	940,986	698,103	.....	242,886
Fort Totten.....	1,616,866	1,614,274	1,286,280	.....	29,629	67,000	70,000	59,356	2,582	.....	.....	2,582
Standing Rock.....	14,780,186	14,743,262	13,665,208	.....	159,337	187,000	50,000	781,517	36,833	.....	26,500	8,433
Turtle Mountain.....	4,499,526	3,666,229	3,160,000	.....	77,824	148,000	45,000	235,405	833,297	.....	.....	833,297

Oklahoma.....	255,022,601	220,841,426	199,287,001	72,000	14,197,804	4,000,051	1,280,933	2,003,526	34,181,266	13,000,750	71,718	20,508,768
Cantonment.....	1,361,054	1,359,169	1,064,240	.....	50,769	197,000	65,000	83,150	1,895	.....	.....	1,965
Cheyenne and Arapaho.....	5,043,467	4,423,886	3,780,002	.....	205,051	97,701	40,863	289,739	620,081	.....	.....	620,081
Five Civilized Tribes.....	191,175,978	168,579,343	157,942,380	(*)	10,636,983	(*)	(*)	(*)	22,946,635	*12,734,384	71,718	9,790,533
Klawa.....	19,747,881	16,837,861	13,019,010	.....	1,383,851	870,000	415,000	839,850	2,910,020	.....	.....	2,910,020
Osage.....	19,244,316	12,776,114	8,601,238	.....	1,362,026	1,485,000	500,000	82,355	6,465,901	.....	.....	6,465,901
Otoe.....	1,754,316	1,644,866	1,351,531	72,000	1,362,026	81,500	57,500	39,888	109,430	6,460	.....	109,430
Pawnee.....	3,577,532	3,418,272	2,658,804	.....	61,580	635,000	23,000	39,888	159,260	.....	.....	159,260
Ponca.....	2,742,520	2,632,265	2,261,400	.....	95,925	179,650	44,110	71,200	89,945	4,800	.....	85,145
Sac and Fox.....	1,646,789	1,295,953	939,327	.....	173,036	95,500	22,500	55,590	99,400	.....	.....	360,326
Sagaw.....	2,134,438	1,739,600	1,338,921	.....	138,921	140,850	43,750	31,317	380,326	.....	.....	380,326
Seneca.....	4,356,401	4,346,539	3,852,605	.....	31,728	222,450	50,250	189,505	9,862	6,070	.....	3,792
Shawnee.....	2,238,228	1,381,188	1,176,954	.....	67,953	35,400	18,950	81,932	857,039	.....	.....	8,023
Shawnee.....	45,571,818	12,063,964	7,505,140	2,404,900	256,030	370,000	161,000	1,966,894	33,507,854	4,012,785	29,180,987	3,314,102
Oregon.....	28,943,558	2,954,301	1,270,880	540,000	50,741	133,000	38,000	921,770	25,989,167	2,160,000	23,709,000	111,157
Klamath.....	2,675,862	2,673,696	2,521,961	1,800,000	96,717	115,000	65,000	75,000	2,164	.....	.....	2,164
Roeburg.....	19,701,065	4,339,421	374,500	18,000	25,949	.....	.....	19,972	261,644	12,800	185,000	53,844
Umatilla.....	5,575,751	5,103,354	4,539,850	8,400	53,084	105,000	28,000	269,020	472,397	305,010	21,300	146,867
Warm Springs.....	7,675,582	883,106	697,929	37,500	29,536	17,000	30,000	81,132	6,783,432	1,525,975	5,255,667	5,255,667
South Dakota.....	58,587,079	51,324,883	42,638,696	59,000	1,983,559	1,456,375	822,000	4,365,253	7,272,196	3,004,136	223,727	5,044,330
Canton Asylum.....	1,721	1,721	.....	.....	1,721	.....	.....	.....	.....	.....	.....	.....
Cheyenne River.....	10,932,549	8,064,973	6,964,854	.....	143,587	330,000	50,000	626,532	2,867,576	1,402,700	57,108	1,407,757
Crow Creek.....	3,168,528	3,083,827	2,621,261	.....	44,179	115,000	55,000	328,387	104,696	.....	.....	104,696
Flandreau.....	124,948	121,890	84,000	.....	660	50,000	7,000	10,200	3,058	.....	.....	3,058
Lower Brule.....	2,313,815	2,149,611	1,662,770	9,000	74,268	50,000	15,000	338,573	164,204	75,900	36,598	51,336
Pine Ridge.....	15,746,405	14,462,970	12,295,900	50,000	173,753	225,000	295,000	1,423,317	1,263,435	625,436	110,550	647,445
Roeburg.....	13,611,279	11,339,046	9,240,779	.....	646,463	99,500	193,000	1,159,304	2,272,233	.....	19,300	2,253,533
Siasseton.....	6,551,859	6,855,988	6,144,180	.....	212,658	245,375	95,000	390,163	299,892	.....	.....	299,892
Yankton.....	5,541,859	5,294,857	3,824,952	.....	686,242	331,500	82,000	390,163	277,102	.....	.....	277,102
Utah.....	5,900,405	3,298,049	2,120,048	.....	270,510	93,200	60,200	754,091	2,002,356	579,400	34,575	1,968,081
Goshute.....	54,825	14,825	.....	.....	.....	1,500	500	12,825	40,000	40,000	.....	40,000
Shilwits.....	18,265	9,765	.....	.....	.....	2,600	1,700	5,465	8,500	8,500	.....	8,500
Utah and Ouray.....	5,827,315	3,273,459	2,120,048	.....	270,510	89,100	58,000	735,801	2,533,856	530,900	34,575	1,968,081

\* Includes \$4,580,000 Liberty loan bonds.  
 \* Includes \$12,319,000 lowest estimate value of coal.  
 \* Includes \$748,000 Liberty loan bonds.  
 \* Includes Santee formerly listed in Nebraska.

1 Tribal timber.  
 \* Sundry repair vacations.  
 \* 1917 report except last item.  
 \* Not reported.



TABLE 37.—Value of Indians' individual and tribal property, June 30, 1918—Continued.

States and superintendencies.	Total Individual and tribal property.	Individual.						Tribal.				
		Total.	Lands exclusive of timber.	Timber.	Funds in banks and in hands of superintendents.	Homes, furniture, barns, etc.	Wagons, implements, etc.	Stock, poultry and other property.	Total.	Lands exclusive of timber.	Timber and stock.	Balance of funds in treasury.
Washington.....	\$47,000,209	\$30,653,198	\$23,638,593	\$4,068,601	\$882,607	\$512,012	\$659,835	\$891,450	\$16,347,011	\$4,491,915	\$11,590,290	\$284,806
Colville.....	12,956,087	11,000,118	8,883,370	400,000	316,589	243,032	563,200	563,897	1,955,969	851,545	1,024,407	80,017
Cushman.....	667,631	562,960	439,238	48,000	22,840	21,000	7,190	24,742	104,651	.....	.....	104,651
Neah Bay.....	377,098	79,741	17,000	4,000	871	31,850	4,775	21,245	297,337	22,357	275,000	.....
Spokane.....	3,066,864	1,543,849	860,020	523,440	39,212	62,000	13,500	45,677	1,543,015	421,845	1,082,500	28,670
Taholah.....	9,478,868	1,641,030	350,892	1,227,566	2,117	41,650	10,000	8,805	7,837,838	1,512,894	6,319,908	6,098
Tulalip.....	4,403,323	4,399,616	2,585,197	1,820,465	254,930	112,450	31,270	95,304	3,707	.....	.....	8,707
Yakima.....	16,030,338	11,425,864	10,502,906	545,130	246,048	(*)	(*)	131,780	4,604,474	1,683,274	2,878,475	41,725
Wisconsin.....	19,315,544	7,435,564	3,249,239	152,297	1,733,852	1,226,700	193,285	889,191	11,879,969	3,535,252	6,096,882	2,347,846
Grand Rapids.....	365,875	299,389	60,000	.....	(*)	100,000	26,000	74,389	106,486	.....	3,400	103,086
Hayward.....	794,977	763,977	594,000	.....	62,917	35,000	5,000	28,060	1,000	.....	.....	.....
Keshena.....	11,702,247	646,325	.....	96,000	126,075	56,000	28,385	443,865	11,083,922	3,085,340	5,980,911	1,987,671
Las du Flambeau.....	1,014,200	734,848	353,994	20,297	87,108	216,000	31,200	17,249	279,448	102,069	23,836	153,517
Laona.....	383,695	130,087	.....	.....	58,467	29,200	4,700	37,700	263,608	263,608	.....	.....
La Pointe.....	2,847,573	2,672,398	800,767	14,000	1,352,456	325,000	74,600	106,675	175,176	83,215	88,735	3,225
Oneida.....	1,897,718	1,897,371	1,312,158	.....	6,533	396,000	26,000	168,689	175,247	.....	.....	347
Red Cliff.....	299,169	299,169	128,320	40,000	41,276	70,500	4,500	14,573	.....	.....	.....	.....
Wyoming: Shoshone.....	4,240,747	1,442,517	829,086	.....	73,861	23,000	40,000	477,570	2,808,290	1,610,249	1,176,564	21,397

\* No data.

\* 1917 report.

TABLE 38.—*Employees in Indian school and agency service, based on salary list in effect June 30, 1918.*

Position.	Total		School service.		Agency service.		Range of salaries. <sup>1</sup>
	Num-ber.	Salary.	Num-ber.	Salary.	Num-ber.	Salary.	
Total.....	5,313	\$3,609,184	2,758	\$1,867,777	2,555	\$1,741,407	.....
Supervision of Indians:							
Superintendents and assistants	142	253,525	139	246,375	3	7,150	\$1,000 to \$2,750
Cashiers and storekeepers.....	2	3,850	1	1,000	1	2,850	1,000 to 2,850
Clerks.....	620	613,640	119	101,460	501	512,180	600 to 1,600
Stenographers.....	40	39,000	1	730	39	38,280	660 to 1,080
Principals and assistants.....	95	99,155	95	99,155			720 to 1,400
Disciplinarians.....	65	47,080	65	47,080			600 to 1,200
Judges.....	86	7,104			86	7,104	84
Police, privates.....	548	161,588	1	240	547	161,348	240 to 420
Constables.....	3	2,520			3	2,520	540 to 780
Education:							
Academic—							
Teachers.....	573	395,592	572	395,007	1	585	600 to 900
Kindergartners.....	21	13,640	21	13,640			600 to 750
Industrial teachers.....	53	40,180	52	39,640	1	540	900 to 1,000
Mechanical—							
General mechanics.....	46	35,720	14	12,040	32	23,680	360 to 1,200
Engineers and assistants.....	131	103,260	90	77,340	32	25,920	600 to 1,000
Blacksmiths and carpenters.....	155	113,300	66	49,060	89	64,240	480 to 900
Shoe and harness makers.....	26	16,340	22	13,760	4	2,580	540 to 780
Others.....	24	19,700	13	10,860	11	8,900	300 to 1,000
Domestic science—							
Teachers.....	21	13,560	21	13,560			540 to 840
Housekeepers.....	193	67,220	188	64,620	5	2,600	300 to 600
Matrons.....	116	72,655	111	70,015	5	2,640	540 to 840
Assistant matrons.....	152	76,785	152	76,785			300 to 660
Cooks and bakers.....	203	102,140	178	89,860	25	12,280	300 to 600
Seamstresses and laun- dresses.....	259	124,735	245	118,955	14	5,780	300 to 600
Health: <sup>2</sup>							
Physicians.....	195	199,404	66	52,080	130	137,324	360 to 1,800
Nurses.....	101	68,030	61	41,300	40	26,640	600 to 780
Matrons—							
Field.....	87	58,010	4	2,220	83	58,790	300 to 900
Hospital.....	4	2,460	3	1,740	1	720	600 to 780
Agriculture and stock:							
Superintendents of live stock and stockmen.....	68	62,776	8	8,400	60	54,376	715 to 1,300
Farmers and assistants.....	321	253,797	60	46,930	261	206,867	600 to 1,100
Line riders.....	27	16,260			27	16,260	360 to 720
Others.....	72	41,330	15	11,340	57	29,990	450 to 1,000
Forestry:							
Deputy supervisors.....	7	10,600			7	10,600	1,300 to 1,600
Forest guards.....	73	58,910			73	58,910	450 to 900
Sawyers.....	7	6,180			7	6,180	600 to 1,200
Others.....	31	32,660			31	32,660	440 to 1,100
Miscellaneous:							
Assistants.....	179	56,600	147	44,820	32	11,780	120 to 600
Laborers.....	407	204,935	198	103,655	209	101,280	300 to 720
Teamsters.....	22	9,840	3	1,140	19	8,700	360 to 600
Interpreters.....	53	29,820			53	29,820	240 to 600
Painters.....	8	6,240	8	6,240			660 to 840
Others.....	77	80,963	11	6,620	66	74,333	120 to 1,000

<sup>1</sup> Occasionally extremely high and low salaries are not embraced herein.

<sup>2</sup> Does not include 139 positions at \$69,360, carried under various activities.

<sup>3</sup> Includes 74 contract physicians, whose time is only partly employed in the Indian Service.

TABLE 39.—*Miscellaneous field employees, June 30, 1918.*

Designation.	Total.		Chief-officer.		Others.	
	Num- ber.	Salary.	Num- ber.	Salary.	Num- ber.	Salary.
<i>Field investigating and supervising force.</i>						
Total.....	121	\$195,060	15	\$31,400	106	\$163,660
Inspection.....	7	17,000	1	3,500	6	13,500
Special supervisors.....	13	25,800			13	25,800
Liquor.....	24	32,190	1	2,000	23	30,190
Construction.....	8	14,500			8	14,500
Health.....	24	33,420			24	33,420
Schools.....	8	17,600	1	3,000	7	14,600
Industries:						
Farming.....	1	3,600	1	3,600		
Employment.....	3	3,700	1	2,000	2	1,700
Live stock.....	1	( <sup>1</sup> )	1	( <sup>1</sup> )		
Forestry:						
Field supervising officers.....	10	18,250	1	3,000	9	15,250
Menominee.....	12	12,990	1	1,600	11	11,390
Special agents.....	4	5,320	1	2,000	3	3,320
Commissioner to negotiate with Seminole Indians.....	1	2,000	1	2,000		
Attorney for Pueblo Indians.....	1	1,500	1	1,500		
Traveling auditors.....	4	7,200	4	7,200		
<i>Field irrigation service.</i>						
Total.....	200	256,655	14	28,000	186	228,655
Chief inspector.....	1	4,000	1	4,000		
Superintendents of irrigation.....	8	18,500	1	2,500	7	16,000
Arizona.....	5	4,600	2	2,700	3	1,900
Pima.....	4	3,200	1	1,500	3	1,800
Salt River.....	1	1,200	1	1,200		
California: Miscellaneous work.....	33	45,860	2	4,000	31	41,860
Idaho: Fort Hall.....	13	13,060	1	1,600	12	11,460
Montana.....	26	28,625	2	3,300	24	25,225
Billings.....	1	1,600			1	1,600
Crow.....	10	12,450	1	1,800	9	10,650
Fort Belknap.....	14	14,175	1	1,500	13	12,675
Tongue River.....	1	300			1	300
New Mexico: Albuquerque.....	15	20,780	1	2,000	14	18,780
Utah.....	29	37,150	2	3,800	27	33,350
Salt Lake.....	11	15,400	1	1,800	10	13,600
Uintah.....	18	21,750	1	2,000	17	19,750
Washington: Yakima.....	53	66,680	1	2,100	52	64,580
Wyoming: Shoshone.....	17	17,600	1	2,000	16	15,600
<i>Field allotment service.</i>						
Total.....	24	22,925	4	3,780	20	19,145
Special allotting agent.....	1	( <sup>1</sup> )	1	( <sup>1</sup> )		
Arizona.....	3	2,820			3	2,820
Leupp.....	1	720			1	720
Pima.....	2	2,100			2	2,100
Montana.....	4	2,665	1	540	3	2,125
Blackfeet.....	2	765	1	540	1	225
Crow.....	1	500			1	500
Fort Peck.....	1	1,400			1	1,400
North Dakota: Turtle Mountain.....	1	900			1	900
Oregon: Umatilla.....	3	2,860			3	2,860
South Dakota.....	9	10,500	1	2,160	8	8,340
Pine Ridge.....	2	2,100			2	2,100
Rosebud.....	7	8,400	1	2,160	6	6,240
Wisconsin: La Pointe.....	3	3,180	1	1,080	2	2,100

<sup>1</sup> \$10 a day when actually employed.

TABLE 39.—*Miscellaneous field employees, June 30, 1918—Continued.*

Designation.	Total.		Chief officer.		Others.	
	Num-ber.	Salary.	Num-ber.	Salary.	Num-ber.	Salary.
<i>Heirship work.</i>						
Examiners.....	55	\$80,200	18	\$32,600	37	\$27,000
<i>Probate work.</i>						
Attorneys.....	20	50,000	20	50,000	.....	.....
<i>Warehouses.</i>						
Total.....	35	36,200	3	6,200	32	30,000
Chicago.....	21	21,650	1	2,200	20	19,450
San Francisco.....	6	6,620	1	2,000	5	4,620
St. Louis.....	8	8,020	1	2,000	7	6,020

TABLE 40.—*Recapitulation of all Indian Service employees.*

Designation.	Number.	Salaries.
Total.....	6,028	\$4,567,074
School.....	12,758	1,867,777
Agency.....	12,555	1,741,407
Field investigating and supervising force.....	121	195,060
Irrigation service.....	200	258,655
Allotment service.....	24	22,925
Heirship work.....	55	60,260
Probate work.....	20	50,000
Warehouses.....	35	36,200
Indian Office employees, exclusive of commissioner and assistant commissioner.....	260	336,700

<sup>1</sup> School and agency includes 2,379 Indians earning \$1,008,316.

TABLE 41.—*Commissioner's account for fiscal year ended June 30, 1918.*

[Checks, drafts, and other instruments of exchange, drawn to the order of the commissioner, are received in the office as deposits with bids for tribal leasing privileges, guaranties for right of way across Indian lands, and for various other purposes. For such receipts the commissioner renders monthly accounts as required by sec. 3622, Rev. Stats.]

On hand July 1, 1917.....	\$154,446.66
Received:	
July, 1917.....	\$9,384.36
August, 1917.....	44,141.35
September, 1917.....	2,073.67
October, 1917.....	1,063.86
November, 1917.....	26,262.55
December, 1917.....	20,578.82
January, 1918.....	36,571.41
February, 1918.....	15,609.37
March, 1918.....	1,345.23
April, 1918.....	4,724.64
May, 1918.....	22,740.43
June, 1918.....	6,961.21
Total on hand and received.....	344,903.66
Disbursed and deposited:	
July, 1917.....	\$251.43
August, 1917.....	20,810.51
September, 1917.....	1,396.06
October, 1917.....	317.04
November, 1917.....	182,090.50
December, 1917.....	26,890.25
January, 1918.....	26,001.00
February, 1918.....	15,611.88
March, 1918.....	5,960.72
April, 1918.....	5,974.94
May, 1918.....	32,059.83
June, 1918.....	6,879.17
Total.....	323,233.28
Balance on hand June 30, 1918.....	21,670.38

TABLE 42.—Receipts and disbursements on account of sales of Indian lands from July 1, 1917, to June 30, 1918.

Title of fund.	Dates of acts or treaties.	Statutes at Large.		On hand July 1, 1917.	Received.	Disbursed.	On hand June 30, 1918.
		Vol.	Page.				
Apache, Kiowa, and Comanche 4 per cent fund.....	Mar. 27, 1908	35	49	\$2,363,455.09	\$72,032.76	\$321,618.53	\$2,112,869.32
	June 5, 1906	34	213				
	June 25, 1906	34	550				
Cherokee and Arapahoe in Oklahoma 3 per cent fund.....	June 17, 1910	34	533	192,806.33	19,092.20	290.63	211,605.90
	Jan. 14, 1889	25	642				
Chippewas in Minnesota fund <sup>1</sup> .....	Feb. 20, 1896	25	37	5,605,947.23	382,405.89	187,992.14	5,799,960.48
	June 27, 1902	32	400				
Cherokee River Reservation 3 per cent fund.....	May 28, 1906	35	460	965,533.65	283,505.55	53,426.55	1,185,912.35
	June 25, 1910	34	592				
Cœur d'Alene 3 per cent fund.....	June 21, 1906	34	335	190,316.48	11,691.13	102,119.53	99,788.08
Fort Berthold Reservation 3 per cent fund.....	June 30, 1910	34	558	163,114.65	221,080.12	169,839.73	214,364.94
Fort Peck Reservation 3 per cent fund.....	May 30, 1913	35	599	590,488.49	246,686.55	420,325.13	408,824.70
Kiowa Agency Hospital 4 per cent fund.....	June 10, 1913	35	32	79,960.17	27,888.19	14,975.23	92,663.14
	June 16, 1870	35	362				
	May 19, 1872	17	90				
Osage fund.....	June 19, 1880	31	292	4,999,511.00	9,981.37	194,529.97	4,814,962.40
	Aug. 29, 1880	31	343				
Pine Ridge Reservation 3 per cent fund.....	May 30, 1910	34	443	117,339.51	10,952.29	29.64	128,262.16
Rosebud Reservation 3 per cent fund.....	May 30, 1910	34	443	446,013.09	32,765.20	267.88	478,516.41
Round Valley general fund.....	Mar. 3, 1890	26	458	895.21	35,235.61	26,697.37	9,433.55
	Mar. 3, 1882	22	106				
Shoshone and Bannock fund.....	July 7, 1884	25	455	7,231.83	30.00		7,261.83
	Apr. 7, 1908	35	460				
Standing Rock Reservation 3 per cent fund.....	Feb. 14, 1913	37	343	361,893.76	224,773.96	104,749.45	481,921.19
Umatilla general fund.....	Mar. 3, 1883	22	343	133,029.43	1,798.87	6,201.78	128,836.52
Ute Confederate Bands of 4 per cent fund.....	Mar. 3, 1913	37	634	2,680,028.37	30,177.06	274,654.56	2,436,162.07
Proceeds of							
Colville Reservation, Wash.	Mar. 22, 1906	33	352	30,378.30	26,754.21	1,900.13	64,532.38
Crow ceded lands, Montana.	Apr. 27, 1904	33	316	328,308.60	*301,514.45	207,588.18	429,135.87
Devils Lake Reservation, N. Dak.	Apr. 22, 1904	33	316	1,440.89	1,797.93	67.34	2,451.48
Flathead Reservation, Mont.	Apr. 21, 1904	33	303	257,331.78	109,270.34	126,054.92	240,547.78
Irrigable land, Yuma Reservation, Cal.	Feb. 20, 1904	33	50	5,182.28	6,182.28	6,297.21	1,820.33
Red Lake Reservation, Minn.	Apr. 22, 1904	33	258	246,394.80	12,866.83	126,591.71	132,669.92
Rosebud Reservation, S. Dak.	Mar. 2, 1907	34	1230	359,222.59	10,671.96	345,209.69	24,584.86
Siletz Reservation, Oreg.	May 13, 1910	36	367	12,464.07	23,699.66		86,064.33
Southern Ute Reservation, Colo.	Feb. 20, 1906	33	678	1,952.00		40.00	184,823.11
Spokane Reservation, Wash.	May 28, 1908	35	488	28,931.82	1,172.39		28,012.13
Surplus Oklawatomie lands, Kansas.	June 21, 1908	34	577	8,771.48	278.10	65.65	8,503.73
Surplus Puyallup school lands.							9,010.88

Town lots, White Earth Reservation, Minn.....	Mar. 1, 1907	34	1032	0, 475. 79	90. 00	.....	9, 565. 79
Utah and White River Ute lands.....	May 27, 1902	32	203	142, 673. 30	170, 174. 40	114, 650. 95	198, 186. 75
Wichita ceded lands.....	Mar. 3, 1905	33	1069	11, 650. 67	181. 81	.....	11, 804. 49
Wind River Reservation, Wyo.....	Mar. 2, 1895	28	894	24, 621. 44	6, 428. 53	25, 266. 30	5, 780. 77
Indian moneys, proceeds of labor—	Mar. 3, 1905	33	1016				
Chickasaw, town lots.....	Mar. 3, 1893	22	560	282. 07	98. 93	90. 00	280. 00
Chickasaw, unallotted lands.....	Mar. 2, 1887	24	463				
Choctaw, unallotted lands.....	Apr. 26, 1906	34	143	1, 105, 764. 83	* 693, 102. 86	* 904, 718. 53	894, 143. 86
Choctaw, unallotted lands.....	Mar. 3, 1911	36	1070				
Choctaw, town lots.....	Apr. 26, 1906	34	143	3, 312, 636. 89	* 1, 977, 859. 16	* 3, 346, 444. 31	1, 944, 061. 74
Choctaw, town lots.....	Mar. 3, 1911	36	1070				
Creek, town lots.....	Mar. 3, 1893	22	560	67, 342. 41	277. 32	280. 00	67, 389. 73
Creek, town lots.....	Mar. 2, 1887	24	463				
Creek, unallotted lands.....	Mar. 3, 1893	22	560	171, 052. 58	.....		
Creek, unallotted lands.....	Mar. 2, 1887	24	463				
Seminole, unallotted lands.....	Apr. 26, 1906	34	143	90, 752. 01	* 60, 518. 08	1, 596. 36	149, 700. 73
Seminole, unallotted lands.....	Mar. 3, 1911	36	1070				
Total.....	Mar. 3, 1911	36	1070	25, 270, 211. 49	5, 063, 266. 28	7, 160, 666. 22	23, 182, 880. 50

\* \$177,500 deposited in Oklahoma banks.  
 \* \$85,000 refunded by Oklahoma banks.  
 \* \$362,500 deposited in Oklahoma banks.  
 \* \$25,000 deposited in Oklahoma banks.  
 \* \$12,851.75 refunded by Oklahoma banks.  
 \* \$28,788.20 refunded by Oklahoma banks.

TABLE 43.—*Liabilities of the United States to Indian tribes under treaty stipulations, June 30, 1918.*

Name of tribes.	Description of annuities, etc.	Number of installments yet unappropriated, explanations, etc.	Statutes.	Annual amount needed to meet stipulations.
Choctaw.....	Permanent annuities.....	(Art. 2, treaty of Nov. 16, 1805, \$3,000..... (Art. 13, treaty of Oct. 18, 1820, \$900..... (Art. 2, treaty of Jan. 20, 1825, \$6,000.....	Vol. 7, p. 99..... Vol. 11, p. 614..... { Vol. 7, pp. 213, 235.	\$9, 000
Do.....	Provisions for smiths, etc.....	(Art. 6, treaty of Oct. 18, 1820..... (Art. 9, treaty of Jan. 20, 1825.....	{ Vol. 7, pp. 212, 236, 614.	920
Cœur d'Alene.....	Employees.....	Art. 11 of agreement of Mar. 26, 1887, ratified by act of Mar. 3, 1891.....	Vol. 26, p. 1029.....	3, 000
Chippewa of the Mississippi.....	For schools, during the pleasure of the President.....	Art. 3, treaty of Mar. 19, 1867.....	Vol. 16, p. 720.....	4, 000
Crow.....	Physician, carpenter, miller, engineer, farmer, blacksmith, etc.....	Treaty of May 7, 1868, art. 10.....	Vol. 15, p. 652.....	6, 000
Navajo.....	For support of schools.....	Treaty of July 26, 1868, art. 6.....	Vol. 15, p. 667.....	100, 000
Northern Cheyenne and Arapaho.....	Subsistence and civilization, per agreement of Feb. 28, 1877, and for pay of 2 teachers, 2 carpenters, 2 farmers, miller, blacksmith, engineer, and physician, per agreement of May 10, 1868.....	Estimated.....	Vol. 19, p. 256; Vol. 15, p. 658.	80, 000
Pawnee.....	Annuity in cash.....	Treaty of Sept. 24, 1857.....	Vol. 11, p. 729.....	30, 000
Do.....	Support of 2 manual-labor schools and pay of teachers.....	do.....	do.....	10, 500
Do.....	Iron, steel, and other articles for shops, 2 blacksmiths, 1 of whom is to be tin and gunsmith, 2 strikers and apprentices, 2 teachers, etc.....	{ Estimated for iron and steel \$500..... { Estimated.....	do.....	5, 400
Do.....	Pay of physician.....	do.....	do.....	1, 500
Quapaw.....	For education, smith, farmer, and smith shop during the pleasure of the President.....	\$1,000 for education, \$500 for smith, etc.....	Vol. 11, p. 730..... Vol. 7, p. 425.....	1, 500
Sauces of New York.....	Permanent annuities.....	Feb. 19, 1831.....	Vol. 4, p. 442.....	6, 000
Shoshoni and Bannock.....	Physician, carpenter, teacher, engineer, farmer, and blacksmith.....	Estimated.....	Vol. 15, p. 676.....	5, 009
Do.....	Blacksmith, and for iron and steel for shops.....	do.....	do.....	1, 000
Do.....	Physician, carpenter, miller, teacher, engineer, farmer, and blacksmith.....	do.....	do.....	6, 000
Bannock.....	Permanent annuities in clothing, etc.....	do.....	do.....	4, 500
Six Nations, of New York.....	Blacksmith, and for iron and steel.....	Treaty of Nov. 11, 1794.....	Vol. 7, p. 46.....	1, 900
Sioux of different tribes, including Santee Sioux of Nebraska.....	Physician, 5 teachers, carpenter, miller, engineer, farmer, and blacksmith.....	Estimated, art. 8, treaty of Apr. 29, 1868.....	Vol. 15, p. 638.....	10, 400
Do.....	Purchase of rations, etc., as per art. 5, agreement of Sept. 26, 1876, and for support and maintenance of day and industrial schools among the Sioux Indians, including the erection and repairs of school buildings.....	Estimated, art. 13, treaty of Apr. 29, 1868.....	do.....	400, 000
Do.....	Pay of blacksmith and carpenter.....	Estimated, act Feb. 26, 1877, Mar. 2, 1889, and Aug. 1, 1914.....	Vol. 19, p. 256; Vol. 38, p. 603.	1, 000
Spokane.....	Pay of blacksmith and carpenter.....	Agreement of Mar. 18, 1887, ratified July 13, 1892.....	Vol. 27, p. 139.....	1, 000

Essequache, Meeche, Capote, Winimuche, Yampa, Grand River, and Uintah Bands of Utes.	For iron and steel and necessary tools for blacksmith shop.	Estimated, art. 9, treaty of Mar. 2, 1868.	Vol. 15, p. 621.	220
Do.	2 carpenters, 2 millers, 2 farmers, 2 blacksmiths, and 2 teachers.	Estimated, art. 15, treaty of Mar. 2, 1868.	Vol. 15, p. 622.	8,320
Do.	Annual amount to be expended under the direction of the Secretary of the Interior in supplying beef, mutton, wheat, flour, beans, etc.	Art. 12, treaty of Mar. 2, 1868.	do.	80,000
Total.				725,360



TABLE 44.—*Pro rata shares of tribal trust funds settled during fiscal year ended June 30, 1918.*

States and superintendencies.	Tribes.	Indians paid.	Average pro rata share.	Amount paid.
Total.....		4,061		\$1,277,984.90
Idaho: Coeur d'Alene.....	Coeur d'Alene.....	282	343.56	96,885.18
Iowa: Sac and Fox.....	Sac and Fox.....	6	1,079.57	6,477.42
Kansas.....		21		8,596.04
Kickapoo.....	Kickapoo.....	12	577.37	6,928.44
Potawatomi.....	Potawatomi.....	9	85.26	1,667.60
Montana: Flathead.....	Confederated Flathead.....	1,002	110.43	110,653.54
Nebraska: Santee.....	Ponca.....	9	65.68	591.12
New York: New York.....	Tonawanda (Seneca).....	12	154.75	1,857.00
North Dakota: Standing Rock.....	Sioux.....	233	149.17	34,757.10
Oklahoma.....		1,199		789,717.81
Cheyenne and Arapaho.....	Cheyenne and Arapaho.....	25	301.24	7,531.00
Seget.....	do.....	11	301.24	3,313.64
Kiowa <sup>1</sup> .....	Apache, Kiowa, and Comanche.....	425	315.00	133,878.10
Do.....	do.....	198	709.72	140,525.55
Osage.....	Osage.....	77	3,819.76	196,145.37
Otoe.....	Otoe and Missouri.....	353	573.66	258,011.78
Pawnee.....	Pawnee.....	38	455.25	17,299.68
Ponca.....	Ponca.....	9	47.83	430.47
Sac and Fox.....	Sac and Fox.....	33	987.34	32,582.22
Oregon.....		72		14,496.84
Klamath.....	Klamath.....	55	196.06	10,783.36
Umatilla.....	Umatilla.....	17	218.44	3,713.48
South Dakota.....		1,200		211,274.82
Cheyenne River <sup>1</sup> .....	Sioux.....	37	111.28	4,117.36
Do.....	do.....	129	248.14	32,010.06
Crow Creek.....	do.....	53	166.02	8,799.06
Lower Brule.....	do.....	8	138.81	1,110.48
Pine Ridge.....	do.....	215	113.37	24,375.13
Rosebud.....	do.....	434	122.37	53,108.58
Sisseton.....	Sisseton and Wahpeton.....	239	292.35	69,871.65
Yankton.....	Sioux.....	85	210.50	17,892.50
Wisconsin: Keshena.....	Menominee.....	25	107.04	2,676.03

<sup>1</sup> 5 per cent.<sup>2</sup> 4 per cent.<sup>3</sup> 3 per cent.TABLE 45.—*Tribal funds of the Five Civilized Tribes in State and National banks of Oklahoma.<sup>1</sup>*

Tribes.	On deposit June 30, 1918.			Interest.	
	Total.	Principal.	Interest.	Paid in the United States Treasury.	Total paid and due.
Total.....	\$3,858,322.66	\$3,669,347.75	\$188,974.91	\$1,088,759.78	\$1,277,734.69
Choctaw.....	2,137,619.96	2,037,120.26	100,499.70	628,215.69	728,715.39
Chickasaw.....	766,211.89	730,635.95	35,575.94	207,021.57	242,597.51
Cherokee.....				31,892.28	31,892.28
Creek.....	929,496.04	878,041.54	51,454.50	214,477.56	269,932.06
Seminole.....	24,994.77	23,550.00	1,444.77	7,152.68	8,597.45

<sup>1</sup> The deposits are made under the act of Mar. 3, 1911 (36 Stat. L., 1058-1070), in 223 banks. The rates of interest are from 4 to 5½ per cent.

TABLE 46.—*Analysis of disbursement of funds of Five Civilized Tribes, fiscal year ended June 30, 1918.*

	Choctaw.	Chickasaw.	Cherokee.	Creek.	Seminole.	Total.
Salaries and expenses of tribal school employees.....	\$1,841.23	\$1,796.13	\$407.19	\$407.17	\$857.18	\$5,308.90
Expenses of per capita and equalization payments.....	10,559.58	4,288.40	.....	3,038.73	1,795.09	19,681.80
Insurance and repairs to tribal schools and hospitals.....	731.41	243.84	.....	.....	.....	975.25
Expenses account sale of tribal lands and collection of revenue.....	23,403.47	7,801.26	.....	252.61	.....	31,457.34
Refunds account tribal land sale.....	1,512.96	504.37	.....	.....	.....	2,017.33
Tribal officers and expenses.....	5,726.10	8,486.61	75.00	7,543.89	.....	21,831.60
Tribal attorneys and expenses.....	.....	6,056.92	.....	10,668.99	.....	16,725.91
Payments in lieu of allotments.....	4,661.43	300.00	4,046.02	14,080.66	226.91	23,315.02
Per capita payments.....	2,221,407.15	605,619.15	2,437.61	.....	162,839.90	2,992,303.84
Payments, funds transferred to individual accounts.....	184,538.46	9,648.46	286.53	13,176.27	7,908.92	215,558.64
Legal expenses account of town lot suits.....	.....	.....	.....	201.35	.....	201.35
Total.....	2,454,381.79	644,745.14	7,252.35	49,369.67	173,628.00	3,329,376.95

TABLE 47.—*Volume of business in Indian warehouses, fiscal year ended June 30, 1918.*

Warehouses.	Freight shipments.			Express shipments.		
	Number.	Weight.	Value.	Number.	Weight.	Value.
Chicago.....	134,469	<i>Pounds.</i> 15,060,802	\$1,107,810.03	436	<i>Pounds.</i> 10,411	\$6,524.67
San Francisco.....	53,437	7,375,064	414,894.84	37	989	358.30
St. Louis.....	29,579	3,093,450	415,437.45	24	1,054	471.17
Total.....	217,485	25,529,316	1,938,142.32	497	12,454	7,354.14
	Packages mailed.			Percentage of increase of totals over previous year.		
	Number.	Weight.	Value.	Number.	Weight.	Value.
Chicago.....	3,496	<i>Pounds.</i> 17,293	\$12,674.85	<i>Per cent.</i> 17.9	<i>Per cent.</i> 168.0	<i>Per cent.</i> 117.6
San Francisco.....	193	672	532.51	1.7	24.9	42.6
St. Louis.....	2,402	5,978	5,976.55	20.4	91.6	26.0
Total.....	6,091	23,943	19,183.91	14.3	71.6	1.5

<sup>1</sup> Exclusive of coal which was not handled through the warehouses.

<sup>2</sup> Decrease.

Total number of shipments (packages).....	224,073
Total weight.....	25,565,713
Total value.....	\$1,964,680.37

TABLE 48.—*Expense at warehouses, fiscal year ended June 30, 1918.*

Warehouses.	Rent.	Light and fuel.	Employees and inspection of supplies. <sup>1</sup>	Miscellaneous.	Cost of maintenance.		
					Total.	Per cent. <sup>2</sup>	Per cent, 1917.
Chicago.....	\$4,800.00	\$384.09	\$17,665.61	\$3,974.73	\$26,825.03	2.38	2.14
San Francisco.....	2,400.00	13.50	6,971.50	1,174.70	10,559.70	2.54	3.81
St. Louis.....	1,800.00	309.10	12,319.24	1,024.54	15,452.88	3.66	4.55
Total.....	9,000.00	707.29	36,956.35	6,173.97	52,837.61	2.68	2.74
Total, 1917.....					55,666.20	2.74	
Saving over 1918.....					2,828.59		

<sup>1</sup> Includes cost of letting annual contracts for supplies.<sup>2</sup> Shows the relation of the total maintenance cost to the value of goods handled as set out in the preceding table.

# SUPPLIES FOR THE INDIAN SERVICE.

## FISCAL YEAR 1919.

The following tables show the contracts awarded under advertisements of April 15, 17, 19, 22, 24, 26, 27, 29, May 7, 9, 11, 13, 15, 18, 20, and June 5, 10, 15, 17, 19, 21, 22, for supplies for the Indian Service for the fiscal year ending June 30, 1919.

### *Classification of supplies.*

	Page.
Agricultural implements.....	27
Automobile supplies.....	104
Bacon and dry salt meats.....	5
Beef, net, etc.....	106
Blankets.....	8
Boots and shoes.....	15
Carbide.....	105
Clothing, etc.....	13
Chinaware, etc.....	16
Coal.....	105
Desks.....	103
Dry goods.....	8
Enameled ware, etc.....	16
Electrical supplies.....	105
Fire extinguishers.....	105
Furniture and woodenware.....	19
Gasoline.....	104
Glass, window.....	32
Gloves and suspenders.....	11
Groceries.....	5
Hardware.....	42
Harness, leather, and shoe findings, etc.....	22
Hats and caps.....	13
Hose goods.....	77
Kerosene.....	104
Kindergarten supplies.....	100
Lamps, etc.....	17
Medical supplies.....	78
Miscellaneous supplies.....	105
Mutton.....	106
Notions.....	11
Oils, paints, etc.....	32
Oleomargarine.....	104
Piece goods, etc.....	14
Pipe fittings.....	66
Plumber's and steam and gas fitter's tools, fittings, and supplies.....	65
Pork, fresh.....	106
Schoolbooks, etc.....	87
Stoves, pipe, and hollow ware.....	39
Tin and stamped ware.....	37
Underwear and hosiery.....	9
Uniforms, etc.....	13
Wagons and wagon materials.....	28

## NUMBERS AND NAMES OF CONTRACTORS.

1. Albrecht, Gustave A.
2. Aloe Company, A. S.
3. Aluminum Goods Manufacturing Co.
4. American Book Co.
5. American Steel & Wire Co.
6. American Varnish Co., The.
7. Apple Hat Co.
8. Armour & Co.
9. Baker, Hamilton & Pacific Co.
10. Barker Bros.
11. Barlow Co., The J. T.
12. Barnes Co., The A. S.
13. Bauer & Black.
14. Beckley-Cardy Co.
15. Bell Oil Co.
16. Berry Bros.
17. Betz Co., Frank S.
18. Beulah Coal Mining Co.
19. Block & Co. of New York (Inc.).
20. Book Supply Co., The.
21. Boston Belting Corporation.
22. Boyd & Schuster.
23. Boylan, Christopher C.
24. Brandenstein & Co., M. J.
25. Brecht Co., The.
26. Brothers, Howard R.
27. Brown, Charles & Sons.
28. Bucks Stove and Range Co., The.
29. Burley & Tyrrell Co.
30. Byrne, Roy T.
31. California Paint Co.
32. Canfield Stove & Refrigerator Co.
33. Capen Belting & Rubber Co.
34. Capewell Horse Nail Co., The.
35. Caradine Harvest Hat Co.
36. Carpenter Paper Co.
37. Carson, Pirie, Scott & Co.
- 37½. Carstens Packing Co.
38. Carter White Lead Co.
39. Castle, Timothy P.
40. Caxton School Supply Co.
41. Century Co., The.
42. Channon Emery Stove Co.
- 42½. Channon Co., H.
43. Charter Oak Stove & Range Co.
44. Chase Bag Co.
45. Chicago Varnish Co.
46. Chicago White Lead & Oil Co., The.
47. Clark & Co. (Inc.), A. L.
48. Clark Leather Co., James.
49. Cleveland Metal Products Co., The.
50. Cochrane Packing Co., The.
51. Columbia Mills (Inc.), The.
52. Columbia Oil Co.
53. Conrades Manufacturing Co.
54. Cook, Alexander J.
55. Cowen, Mark.
56. Crandall Packing Co.
57. Crane Co.
58. Crescent Feather Co.
59. Cross, Curtis B.
60. Crucible Steel Co. of America.
61. Cudahy Packing Co., The.
62. Dalziel-Moller Co.
63. Damm & Sons Brush Manufacturing Co., John.
64. Davis & Sons, W.
65. Devoe & Reynolds (Inc.).
66. Dietz, John P.
67. Dolliver & Bro.
68. Dugan, Herbert F.
69. Duke, MacMahon & Co.
70. Eastern Manufacturers' Co. (Inc.).
71. Ebbert, Edward F.
72. Ellis, Abraham M.
73. Empire Rubber & Tire Co.
74. Endicott Johnson & Co.
75. Fairbanks, Morse & Co.
76. Fairbank Co., The N. K.
77. Farr, David.
78. Field & Co., Marshall.
79. Fisk Rubber Co. of New York, The.
80. Flanagan Co., A.
81. Forbes Tea & Coffee Co., James H.
82. Ford Co., The J. B.
83. Ford Pulley & Hardware Co.
84. Foster Bros. Manufacturing Co., The.
85. Fox Furnace Co., The.
86. Frank & Co., S. H.
87. Frye & Co.
88. Fuller & Co., W. P.
89. Fulton Bag & Cotton Mills.
90. Garlock Packing Co., The.
91. Garner, John T.
92. Gaunt & Co., Alfred C.
93. Gibson, Hutton.
94. Gilliland Laboratories (Inc.).
95. Gimbel Bros. (Inc.).
96. Ginn & Co.
97. Glens Falls Pharmaceutical Co. (Inc.).
98. Goldberger Manufacturing Co.
99. Goodrich Rubber Co., The B. F.
100. Goodyear Rubber Co.
101. Goodyear Tire & Rubber Co., The.
102. Gould, George H.
103. Graf, Geo. B.
104. Graham Manufacturing Co., James.
105. Granite City Soap Co. (Inc.).
106. Graton & Knight Manufacturing Co., The.
107. Great American Chemical Products Co.
108. Greenberg & Co., Max.
109. Grether Fire Equipment Co.
110. Gudebrod Bros. Silk Co.
111. Gutman Bros.
112. Haas Bros.
113. Haase & Sons Fish Co., A. C. L.
114. Handlan-Buck Manufacturing Co.
115. Hainsch & Sons, R.
116. Hardy & Co., F. A.
117. Haymon, Krupp & Co.
118. Heath & Co., D. C.
119. Herman, Joseph M.
120. Heywood Bros. & Wakefield Co.
121. Hibbard, Spencer, Bartlett & Co.

122. Hirsch & Sons Mercantile Co., Cal.
123. Hodges, Francis M.
124. Holbrook, Merrill & Stetson.
- 124½. Hollister Wilson Laboratories, The.
125. Homann, Henry J.
126. Honeywell, Loyd.
127. Hopkins, Temp H.
128. Horlick's Malted Milk Co.
129. Houghton Mifflin Co.
130. Howard, R. H.
131. Howe Rubber Co. (Inc.).
132. Hubbard, Albert C.
133. Hudson & Boas.
134. Huks Rattan & Willowware Manufacturing Co., William.
135. Illinois Glass Co.
136. Imelli, Samuel A.
137. Independent Baking Co.
138. Inland White Lead Co.
139. Johns, Hugh M.
- 139½. Johnson, Albert T.
140. Johnson, Andrew.
141. Judge & Dolph Drug Co.
142. Kasper, Peter J.
143. Klaine Co., The F. A.
144. Kling Bros. & Co. (Inc.).
145. Kullman, Salz & Co. (Inc.).
146. Lammert Furniture Co.
147. Landers, Frary & Clark.
148. Laumann, Adam H. W.
149. Laporte, J. K.
150. Lindemann & Hoverson Co., A. J.
151. Lippincott Co., J. B.
152. Long Syrup Co., H. C.
153. Longman, Green & Co.
154. Luchetti, A.
155. Lunsford & Sutherland.
156. Lyster Chemical Co.
157. McCarthy, Charles F.
158. McDonald Manufacturing Co., A. Y.
159. MacMillan Co., The.
160. Madison Trading Co. (Inc.).
161. Maendler Bros.
162. Mallinckrodt Chemical Works.
163. Manhattan Rubber Manufacturing Co., The.
164. Mason, Ehrman & Co.
165. Matthews & Co., George T.
166. May Department Stores Co.
167. Meyer Bros. Drug Co.
168. Merrill Co., Charles E.
169. Millers Falls Co.
170. Milliken & Co., John T.
171. Miller, George L.
172. Milton Bradley Co.
173. Missouri Lamp & Manufacturing Co.
174. Monarch Knitting Co., The.
175. Monsanto Chemical Works.
176. Montgomery, Ward & Co. (Inc.).
177. Mueller Manufacturing Co., The.
178. Mulford Co., H. K.
179. National Lead Co.
180. Neustadter Bros.
181. Newark Button Co.
182. Newbauer & Co., J. H.
183. Norwick Pharmacal Co., The.
184. Nystrom, Albert J.
185. Oakley Paint Manufacturing Co.
186. Oldham New York Saw Works (Inc.), The.
187. One Minute Manufacturing Co.
188. Orange-Judd Co.
189. Ottenheimer Bros.
190. Pacific Coast Syrup Co.
191. Pacific Commercial Co.
- 191½. Palace Meat Market.
192. Palmer Co., The A. N.
193. Paraffine Companies (Inc.), The.
194. Parke, Davis & Co.
195. Patent Vulcanite Roofing Co.
196. Pendry, Harrison E.
197. Peninsular Stove Co., The.
198. Peoria Cordage Co.
199. Pilot Knitting Mills.
200. Pipestone Oil Co.
201. Pioneer Rubber Shoe Co.
202. Pioneer Soap Co.
203. Pittsburgh Plate Glass Co.
204. Powell Co., The William.
205. Puhl-Webb Co.
206. Pyrene Manufacturing Co.
207. Quaker Oats Co., The.
208. Rand McNally & Co.
209. Rapp & Co., Leland S.
210. Rasmussen, Albert.
211. Reed & Co., Samuel I.
212. Reichert & Co. (Inc.), F.
213. Reid, Murdoch & Co.
214. Reid Bros. (Inc.).
215. Rex Tablet Co.
216. Richter, Conrad.
217. Riverside Broom & Mop Co.
218. Russell Manufacturing Co., The.
219. St. Louis Glass & Queensware Co.
220. St. Louis Screw Co.
221. Savoy Drug & Chemical Co.
222. Scarritt Comstock Furniture Corporation.
223. Schultz & Hirsch Co.
224. Schuster, Boyd V.
225. Scruggs, Vandervoort & Barney Dry Goods Co.
226. Seidel Manufacturing Co.
227. Shapleigh Hardware Co.
228. Sherwin-Williams Co., The.
229. Shores Mueller Co.
230. Silver, Burdette & Co.
231. Singer Sewing Machine Co., The.
232. Simmons Co., The.
233. Skoog, Nils J.
234. Smith, Charles J.
235. South Bend Chilled Plow Co.
236. Spotswood-Helfer Co.
237. Squibb Sons, E. R.
238. Standard Crayon Manufacturing Co.
239. Standard Oil Co. (California).
240. Standard Oil Co. (Indiana).
241. Standard Sanitary Manufacturing Co.
242. Standard School Supply Co.
243. Stechert Co. (Inc.), F. C.
244. Steiger & Co., E.

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| <p>245. Stork &amp; Co. (Inc.), Charles T.<br/>246. Strong Harral Co. (Inc.), The George.<br/>247. Stover Manufacturing &amp; Engineering Co.<br/>248. Studebaker Corporation of America, The.<br/>249. Sunset Broom &amp; Brush Co.<br/>250. Superior Manufacturing &amp; Supply Co.<br/>251. Susskind, Joseph N.<br/>252. Sutro Bros. Braid Co.<br/>253. Swift &amp; Co.<br/>254. Tay Co., George H.<br/>255. Taylor Instrument Companies.<br/>256. Texas Co., The.<br/>257. Thompson, Oscar T.<br/>258. Thomson &amp; Co.<br/>259. Tribolet Packing Co.<br/>260. Tuthill Spring Co.<br/>261. Tyler, Frank H.<br/>262. Union Carbide Sales Co.<br/>263. Union Meat Co.<br/>264. Union Oil Co. of California.<br/>265. United States Steel Products Co.</p> | <p>266. University Publishing Co.<br/>267. Upton, Abraham L.<br/>268. Utah Fuel Co.<br/>269. Vogelsang, Howard E.<br/>270. Ward &amp; Co.<br/>271. Waterloo Saddlery Co., The.<br/>272. Webb Publishing Co.<br/>273. Weber &amp; Co., Charles F.<br/>274. Wenzel Tent &amp; Duck Co., H.<br/>275. Westermann, William H.<br/>276. Wheeler Varnish Works.<br/>277. Whetton, Arthur J.<br/>278. Whittaker-Glessner Co.<br/>279. White Sewing Machine Co.<br/>280. Wisconsin Pearl Button Co.<br/>281. Witenberg Manufacturing Co.<br/>282. Witte &amp; Sons, John H.<br/>283. Wood Mowing &amp; Reaping Machine Co., Walter A.<br/>284. Worms &amp; Loeb.<br/>285. Yates &amp; Co.<br/>286. Yates, Charles M., jr.<br/>287. Young Bros. (Inc.).<br/>288. Zellerbach Paper Co.</p> |
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CLASS I.—GROCERIES AND PROVISIONS.

[M—quantity for entire service included in Chicago award.]

Article.	Bids opened in Chicago, Ill., Apr. 19, 1918.				Bids opened in San Francisco June 14, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Alfalfa, absolutely pure, ground.	100 pounds				51 pounds <sup>1</sup>			
In 1-pound tins		\$0.23	261	San Francisco, Cal.		\$0.25	112	San Francisco.
Bacon:		.188	261	do.		.204	112	Do
Extra short clear, average weight 30 to 40 pounds.	117,260 pounds	.2892	8	Chicago, Kansas City, Omaha.	M.			
Extra short clear, square cut, 50 to 60 pounds.	92,080 pounds	.2992	8	do.	M.			
Short clear, 50 to 60 pounds.	14,350 pounds	.3142	8	do.	M.			
Clear bellies, 18 to 20 pounds.	3,992 pounds	.3092	8	do.	M.			
Clear bellies, 30 to 35 pounds.	5,700 pounds	.3042	8	do.	M.			
Dry salt pork:								
Rough ribs, 50 to 60 pounds	2,600 pounds	.259	8	do.	M.			
Fat back, 8 to 10 pounds.	39,190 pounds	.249	8	do.	M.			
Short clear back, 30 to 35 pounds.	39,270 pounds	.2842	8	do.	M.			
Baking powder	23,975 pounds				4,534 pounds			
In 1-pound tins		.168	122	Chicago or St. Louis.		.1955	205	Chicago.
In 1-pound tins		.149	122	do.		.1485	205	Do.
Barley, pearl.	12,120 pounds <sup>1</sup>	.0885	207	Chicago.	5,020 pounds <sup>1</sup>	.091	139	San Francisco.
Bath brick.	164 dozen	.69	122	New York.	M.			
Beeswax.	126 pounds	.55	122	Chicago or St. Louis.	No award			
Bining.	868 dozen	.48	213	Chicago	396 dozen <sup>1</sup>	.46	122	St. Louis.
Candles, 6's.	496 pounds	.2175	122	Chicago or St. Louis.	235 pounds <sup>1</sup>	.2175	239	San Francisco.
Cassia (cinamon), ground.	489 pounds	.365	261	San Francisco.	342 pounds <sup>1</sup>	.365	112	Do.
In 1-pound tins		.325	261	do.		.23	112	Do.
In 1-pound tins		.235	213	Chicago.		.32	112	Do.
Cheese, American.	7,240 pounds	.2625	142	do.	M.			
Chocolate.	766 pounds	.73	261	San Francisco.	249 pounds <sup>1</sup>	.85	191	Do.
Cloves, ground.	130 pounds	.694	261	do.	42 pounds	.80	191	Do.
In 1-pound tins					1,835 pounds <sup>1</sup>	.275	112	Do.
Cocoa.	3,402 pounds <sup>1</sup>	.246	112	San Francisco.		.275	112	Do.
In 1-pound tins.		.227	112	do.		.27	112	Do.
In 1-pound tins		.215	112	do.				
In 5-pound tins		.12	287	Seattle, Portland, or San Francisco.	M.			
50,000 pounds <sup>1</sup>								
42,833 pounds <sup>1</sup>								
Coffee, green, for the entire service.	86,138 pounds.	.122	142	Chicago.				

<sup>1</sup> Only.

<sup>2</sup> Will accept increase of 25 per cent provided orders are placed at the time principal award is made.

<sup>3</sup> Per set.

<sup>4</sup> In case lots of 20 sets.

<sup>5</sup> In 12-pound boxes.

<sup>6</sup> In original packages.



## CLASS I.—GROCERIES AND PROVISIONS—Continued.

Article.	Bids opened in Chicago, Ill., Apr. 19, 1918.				Bids opened in San Francisco June 14, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Cornstarch.....	5,590 pounds.....	\$0.07	142	Chicago.....	2,577 pounds.....	\$0.0675	205	Chicago.
Cream tartar.....	197 pounds.....				50 pounds.....			San Francisco
In 4-pound tins.....		.91	213	Chicago.....		.99	191	Do.
In 1-pound tins.....		.85	213	do.....		.97	191	Do.
Fish: Canned salmon.....	1,391 dozen cans <sup>1</sup> .....	2.25	112	San Francisco.....	285 dozen cans <sup>1</sup> .....	2.25	112	Do
Salted salmon—								
In one-half barrels, 100 pounds.....	1,500 pounds <sup>2</sup> .....				1,000 pounds <sup>2</sup> .....			
In barrels, 200 pounds.....	5,600 pounds <sup>2</sup> .....				3,000 pounds <sup>2</sup> .....			
Cod, dried, boneless strips.....	1,455 pounds.....	.18	113	St. Louis.....	M.....			
Mackerel, pickled.....	1,025 pounds.....	.20	113	do.....	M.....			
Flavoring:								
Lemon, liquid.....	707 bottles <sup>1</sup> .....	.225	205	Chicago.....	328.....	.32	191	Do.
Lemon, paste.....	No award.....				No award.....			
Vanilla, liquid.....	817 bottles.....	.40	261	San Francisco.....	409.....	.428	182	Do.
Vanilla, paste.....	No award.....				No award.....			
Ginger, ground.....	264 pounds.....	.314	261	San Francisco.....	147 <sup>1</sup> .....	.34	112	Do.
In 4-pound tins.....		.274	261	do.....		.295	112	Do.
In 1-pound tins.....		.3398	8	Chicago, Omaha, or Kansas City.....				Do.
Ham, smoked.....	4,090 pounds.....							
Hard bread.....	24,305 pounds.....	.329	263	North Portland, Oreg.....	( <sup>4</sup> ).....			
	53,040 pounds.....	.10	137	Chicago, Omaha, Kansas City, and St. Louis.....	18,350 pounds <sup>4</sup> .....			
Hops, fresh, pressed, in 4 and 4 pound packages.	No bid.....				No bid.....			
Lard:								
In 5-pound cans.....	3,000 pounds.....	.2925	8	Chicago.....				
In 10-pound cans.....	31,660 pounds.....	.29	8	Kansas City.....	( <sup>4</sup> ).....			
Lard compound:								
In 5-pound cans.....	2,340 pounds <sup>1</sup> .....	.244	263	North Portland, Oreg.....	( <sup>4</sup> ).....			
In 10-pound cans.....	2,155 pounds <sup>1</sup> .....	.2475	8	Chicago or Kansas City.....	( <sup>4</sup> ).....			
	43,610 pounds.....	.24	8	do.....	( <sup>4</sup> ).....			
	19,280 pounds.....	.234	263	North Portland, Oreg.....	( <sup>4</sup> ).....			
Meacaroni.....	No award.....							
Lye, concentrated.....	1,165 dozen cans.....	.795	122	Chicago or St. Louis.....	472 dozen <sup>1</sup> .....	.957	139	Do.
Matches, safety.....	523 gross.....	.85	164	Portland.....	204 gross.....	.95	164	Portland.
Meat pork.....	125 barrels.....	55.00	8	Chicago, Omaha, or Kansas City.....	( <sup>4</sup> ).....			
	113 barrels.....	50.00	61	Omaha or Sioux City.....	( <sup>4</sup> ).....			



## DRY GOODS, ETC.

[Bids opened in Chicago Apr. 22, 1918.]

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Blankets, single, all wool:				
For single beds, indigo blue, 54 by 84 inches.				
For double beds, 68 by 84 inches.				
For single beds, scarlet, 54 by 84 inches.				
For double beds, 68 by 84 inches.	1,200, 60 by 90,	\$6.45	95	Milwaukee.
For single beds, white, 54 by 84 inches.	4 pounds each.			
For double beds, 68 by 84 inches.	600, 54 by 84, 4	5.50	71	Chicago.
Blankets, single, wool and cotton mixed:				
For single beds, indigo blue, 54 by 84 inches.	500, 60 by 90, 4	6.75	71	Do.
For double beds, 68 by 84 inches.	pounds each.			
For single beds, scarlet, 54 by 84 inches.				
For double beds, 68 by 84 inches.				
For single beds, white, 54 by 84 inches.				
For double beds, 68 by 84 inches.				
Blankets, single, all cotton:				
Tan, 68 by 84 inches, for double beds.	387 <sup>1</sup>	4.65	258	Esmend, R. I. <sup>2</sup>
Gray.	761 <sup>1</sup>	4.65	258	Do. <sup>3</sup>
Tan, 54 by 84 inches, for single beds.	324 <sup>1</sup>	4.07	258	Do. <sup>3</sup>
Gray.	523 <sup>1</sup>	4.07	258	Do. <sup>3</sup>
Counterpanes, white:				
For single beds.	No award.			
For double beds.	do.			
Bedticking.	No bid.			
Calico:				
Indigo.	do.			
Shirting.	do.			
Oil red.	do.			
Crash, linen, washed, without colored border.	90,648 yards <sup>1</sup>	.139	78	Chicago.
Burlap, tan color.	No award.			
Denim, art. green.	do.			
Diaper cloth.	5,862 yards <sup>1</sup>	.226	78	Do.
Duck (Indian Head) approximately 48 by 48, 36 inches, bleached, shrunk finish.	No award.			
Flannel, red, twilled.	do.			
Gingham.	66,862 yards <sup>1</sup>	.275	71	Do.
Hickory shirting.	No award.			
Linen, India.	2,221 yards <sup>1</sup>	.265	78	Do.
Linen, table, 62-inch.	No award.			
Mosquito net or bar.	410 pieces <sup>1</sup>	.90	71	Do.
Outing flannel:				
Dark-colored patterns.	16,281 yards <sup>1</sup>	.325	71	Do.
Light-colored patterns.	26,000 yards <sup>1</sup>	.245	71	Do.
Do.	9,450 yards <sup>1</sup>	.25	71	Do.
Panama cloth, gray, 54-inch.	No bid.			
Panama cloth, dark blue, all wool, 54 inches.	do.			
Serge dress:				
Dark blue, 54 inches.	No award.			
Indigo dye, 80 by 80 count.	( <sup>2</sup> )			
Percale, white and black, 80 by 80 count.	( <sup>2</sup> )			
Plaid, glass, toweling, linen, about 18 to 20 inches wide.	No award.			
Seersucker, blue:				
Crinkled.	( <sup>2</sup> )			
Uncrinkled.	71,060 yards <sup>1</sup>	.245	71	Do.
Sheeting, brown, heavy, standard:				
4/4 (48 by 48), weight about 2.85.	No award.			
4/4 (64 by 86), weight about 3.50.	do.			
6/4.	34,960 yards.	.367	258	Danville, Va. <sup>2</sup>
7/4.	23,340 yards.	.406	258	Do. <sup>3</sup>
9/4.	6,350 yards.	.508	258	Do. <sup>3</sup>
Sheeting, bleached, muslin, 4/4 (64 by 80).	No bid.			
Silesia, black and slate, 36 inches wide.	2,694 yards <sup>1</sup>	.29	133	New York.
White cross bar, for aprons.	No bid.			
Oilcloth, table, 5/4:				
White.	5,969 yards <sup>1</sup>	.242	78	Chicago.
Veined.	526 yards <sup>1</sup>	.242	78	Do.
Opaque, for window shades, assorted colors:				
36 inches wide.	11,221 yards <sup>1</sup>	.299	51	New York or Chicago.
	4,820 yards <sup>1</sup>	.24	71	Chicago.

<sup>1</sup> Only.<sup>2</sup> Freight allowed to Chicago or St. Louis (not including war tax).<sup>3</sup> Added to seersucker, uncrinkled.

DRY GOODS, ETC.—Continued.

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Oleloth, table, 5/4—Continued.				
38 inches wide.....	1,956 yards <sup>1</sup> .....	\$0.294	78	Chicago.
42 inches wide.....	1,655 yards <sup>1</sup> .....	.3528	78	Do.
45 inches wide.....	200 yards <sup>1</sup> .....	.3822	78	Do.
48 inches wide.....	455 yards <sup>1</sup> .....	.4116	78	Do.
54 inches wide.....	5 yards <sup>1</sup> .....	.4704	78	Do.
63 inches wide.....	9 yards <sup>1</sup> .....	.7448	78	Do.
72 inches wide.....	do.....	.833	78	Do.
Translucent, for window shades..... ( <sup>2</sup> )				
Window shade rollers, with fixtures, complete:				
36 inches wide.....	1,531 <sup>1</sup> .....	.10	51	New York or Chicago
38 inches wide.....	705 <sup>1</sup> .....	.10	51	Do.
42 inches wide.....	442 <sup>1</sup> .....	.10	51	Do.
45 inches wide.....	84 <sup>1</sup> .....	.14	51	Do.
48 inches wide.....	155 <sup>1</sup> .....	.14	51	Do.
54 inches wide.....	4 <sup>1</sup> .....	.26	51	Do.
72 inches wide.....	4 <sup>1</sup> .....	1.00	51	Do.
Scarfs, silk, mull, about 2 yards long	830 <sup>1</sup> .....	.79	71	Chicago.
Fascinators, wool, assorted colors <sup>3</sup>	No bid.....			
Cotton bats.....	do.....			
Flags, United States, of the following hoists (width of flag):				
NOTE.—The fly (length of flag) runs 1.9 feet for each foot of hoist.				
2.9 feet.....	No award <sup>4</sup> .....			
3.52 feet.....	do. <sup>4</sup> .....			
5 feet.....	do. <sup>4</sup> .....			
8.94 feet.....	do. <sup>4</sup> .....			
Handkerchiefs, white, good grade of cotton:				
Men's.....	1,717 dozen.....	.68	69	Do.
Ladies'.....	1,365 dozen <sup>1</sup> .....	.425	78	Do.
Mittens, woolen, assorted sizes:				
Boys'.....	184 dozen <sup>1</sup> .....	2.70	37	Do.
Girls'.....	122 dozen <sup>1</sup> .....	1.60	78	Do.
Misses' and women's.....	124 dozen <sup>1</sup> .....	2.25	78	Do.
Mufflers, woolen, knit.....	No bid.....			
Shawls, dark-colored, plaid:				
Single, about 8/4.....	65 <sup>1</sup> .....	4.125	11	Dayton, Ohio.
Double, about 16/4.....	157 <sup>1</sup> .....	4.25	11	Do.
No bid..... ( <sup>5</sup> )				
Skirts, balmoral, wool, gray only.....	2,248.....	.875	174	Chicago.
Skirts, knit, wool, gray only.....				
Sweaters, wool and cotton mixed:				
Children's and misses', sizes 26 to 34 inches, bust measure—				
Cardinal.....	1,000 <sup>1</sup> .....	\$ 1.72	199	Philadelphia.
Navy blue.....	1,113.....	2.125	11	Dayton, Ohio
Gray.....				
Ladies' sizes, 34 to 44 inches, bust measure—				
Cardinal.....	1,160.....	1.975	11	Do.
Navy blue.....	560.....	1.975	11	Do.
Gray.....	772.....	1.975	11	Do.

UNDERWEAR AND HOSIERY.

[Bids opened in Chicago, Apr. 26, 1913.]

Corset waists, misses' and women's, sizes 20 to 30.....	556.....	\$0.85	92	New York.
Undershirts, men's, balbriggan, light, for summer wear, assorted sizes, 34 to 46 inches chest measure.....	3,365.....	.55	11	Dayton, Ohio.
Drawers, men's, balbriggan, light, for summer wear, assorted sizes, 30 to 44 inches waist measure.....	3,707 pairs.....	.55	11	Do.
Undershirts, men's, sleeveless, check nainsook, for summer wear, assorted sizes, 30 to 44 inches chest measure.....	315.....	.41	117	El Paso, Tex.
Drawers, men's, knee, check nainsook, for summer wear, assorted sizes, 30 to 44 inches waist measure.....	50 pairs.....	.41	117	Do.

<sup>1</sup> Only.

<sup>2</sup> Added to opaque.

<sup>3</sup> Colors—cream, white, sky, copenhagen;  $\frac{1}{2}$  of quantity, white or cream.

<sup>4</sup> To be purchased through General Supply Committee, Washington, D. C., at its contract prices.

<sup>5</sup> Added to skirts, knit, wool.

<sup>6</sup> Gray only.

## UNDERWEAR AND HOSIERY—Continued.

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Undershirts, men's, for winter wear, assorted sizes, 34 to 46 inches chest measure.	1,328.....	\$0.75	117	El Paso, Tex.
Drawers, men's, for winter wear, assorted sizes, 30 to 44 inches waist measure.	1,508 pairs.....	.75	117	Do.
Undershirts, men's, extra heavy, for cold climates, assorted sizes, 34 to 46 inches chest measure.	382 <sup>1</sup> .....	1.00	71	Chicago.
Drawers, men's, extra heavy, for cold climates, assorted sizes, 30 to 44 inches waist measure.	408 pairs <sup>1</sup> .....	1.00	71	Do.
Undershirts, boys', balbriggan, light, for summer wear, assorted sizes, ages from 6 to 16 years.	1,546 <sup>1</sup> .....	.375	71	Do.
Drawers, boys', balbriggan, light, for summer wear, assorted sizes, ages from 6 to 16 years.	807 pairs <sup>1</sup> .....	.375	71	Do.
	258 pairs <sup>1</sup> .....	.175	11	Dayton, Ohio.
	690 pairs <sup>1</sup> .....	.25	111	New York.
Undershirts, boys', for winter wear, assorted sizes, ages from 6 to 16 years.	870 <sup>1</sup> .....	.35	11	Dayton, Ohio.
Drawers, boys', for winter wear, assorted sizes, ages from 6 to 16 years.	204 pairs <sup>1</sup> .....	.35	11	Do.
Undershirts, boys', extra heavy, for cold climates, assorted sizes, ages from 6 to 16 years.	48 <sup>1</sup> .....	.375	11	Do.
Drawers, boys', extra heavy, for cold climates, assorted sizes, ages from 6 to 16 years.	74 <sup>1</sup> .....	.345	71	Chicago.
Union suits, men's, assorted sizes, 34 to 46 inches chest measure:	106 pairs.....	.345	71	Do.
Balbriggan, light, for summer wear.....	700 <sup>1</sup> .....	.675	11	Dayton, Ohio.
Check nainsook, sleeveless, for summer wear.	953 <sup>1</sup> .....	.725		
	1,108.....	.715		
Open mesh, sleeveless, for summer wear.....	1,378.....	.425	11	Do.
For winter wear.....	174.....	.665	11	Do.
Extra heavy, for cold climates.....	3,322 <sup>1</sup> .....	1.375	71	Chicago.
Union suits, boys', assorted sizes, ages 6 to 16 years:	1,517.....	1.675	11	Dayton, Ohio.
Balbriggan, light, for summer wear.....	3,087 <sup>1</sup> .....	.355	71	Chicago.
Check nainsook, sleeveless, for summer wear.	428.....	.465	11	Dayton, Ohio.
Open mesh, sleeveless, for summer wear.....	236.....	.395	11	Do.
For winter wear.....	4,092.....	.795	11	Do.
Extra heavy, for cold climates.....	2,531.....	.625	11	Do.
Union suits, for small boys, 6 to 10 years:				
For summer wear.....	603 <sup>1</sup> .....	.375	71	Chicago.
For winter wear.....	635 <sup>1</sup> .....	.67	71	Do.
Extra heavy, for cold climates.....	409.....	.625	11	Dayton, Ohio.
Union suits, women's, 34 to 44 inches bust measure:				
Low neck, sleeveless, for summer wear—				
Sizes 34, 36, 38.....	7,916.....	.255	11	Do.
Sizes 40, 42, 44.....		.27		
For summer wear, long sleeves and high neck—				
Sizes 34, 36, 38.....	2,252 <sup>1</sup> .....	.54	71	Chicago.
Sizes 40, 42, 44.....		.585		
For winter wear—				
Sizes 34, 36, 38.....	5,975 <sup>1</sup> .....	.835	71	Do.
Sizes 40, 42, 44.....		.92		
Extra heavy, for cold climates—				
Sizes 34, 36, 38.....	2,186.....	1.175	11	Dayton, Ohio.
Sizes 40, 42, 44.....		1.225		
Union suits, children's (small girls), 6 to 12 years:				
Low neck, sleeveless, for summer wear.....	2,575 <sup>1</sup> .....	.31	78	Chicago.
For summer wear, long sleeves and high neck.	1,300 <sup>1</sup> .....	.50	71	Do.
For winter wear.....	4,500.....	.595	11	Dayton, Ohio.
Extra heavy, for cold climates.....	1,719.....	.77	11	Do.
Union suits, misses', 14 to 16 years:				
Low neck, sleeveless, for summer wear.....	1,235.....	.265	11	Do.
For summer wear, long sleeves.....	No bid.....			
For winter wear.....	( <sup>1</sup> ).....			
Extra heavy, for cold climates.....	2,473.....	.885	11	Do.

<sup>1</sup> Only.<sup>2</sup> Age 6, rise \$0.03.<sup>3</sup> Age 6, rise \$0.035.<sup>4</sup> Age 6, rise \$0.04.<sup>5</sup> Age 6, rise \$0.04.<sup>6</sup> Age 14, rise \$0.03.<sup>7</sup> Added to extra heavy.<sup>8</sup> Age 14, rise \$0.04.

## UNDERWEAR AND HOSIERY—Continued.

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Half hose:</b>				
Men's—				
Woolen, sizes 10½ to 11½.....	No award.....			
Cotton mixed, heavy, sizes 9½ to 11½..	1,457 dozen pairs¹.....	\$1.60	73	Philadelphia.
Cotton, black, tan, or brown, sizes 8, 9, and 10.....	1,200 dozen pairs¹.....	1.55	73	Do.
	152 dozen pairs.....	1.70		
Boys'—				
Cotton, mixed, heavy, sizes 9 to 10..	No award.....			
Cotton, black, tan, or brown, sizes 8, 9 and 10.....	168 dozen pairs¹.....	1.70	73	Do.
<b>Hose:</b>				
Boys' heavy cotton ribbed, black, sizes 7 to 10.....	1,928 dozen pairs¹.....	2.45	72	Do.
Women's, sizes 9 to 11—				
Heavy, cotton, black, for cold climates—				
Sizes 10½ and 11.....	304 dozen pairs¹.....	2.10	73	Do.
Sizes 9, 9½, and 10.....	800 dozen pairs¹.....	2.00	78	Chicago.
Cotton, black.....	1,266 dozen pairs¹.....	1.60	78	Do.
Misses', sizes 6½ to 8½—				
Heavy cotton, black, for cold climates	No bid.....			
Cotton, black.....	do.....			
Stocking feet, black, tan, or brown, sizes 6½ to 11.....	2,181 dozen pairs¹.....	.65	72	Philadelphia.

## GLOVES AND SUSPENDERS.

[Bids opened in Chicago, Apr. 26, 1918.]

<b>Gloves, buck or horsehide:</b>				
Boys', wool lined.....	632 pairs¹.....	\$0.46	78	Chicago.
Men's', wool lined.....	1,566 pairs¹.....	.56	78	Do.
Boys', unlined.....	260 pairs¹.....	.435	78	Do.
Men's', unlined.....	706 pairs¹.....	.54	78	Do.
<b>Gloves, canvas:</b>				
Boys'.....	5,440 pairs.....	.10	281	Seattle, Wash.
Men's.....	11,511 pairs¹.....	.13	78	Chicago.
<b>Suspenders:</b>				
Boys'.....	3,904 pairs.....	.105	92	New York.
Men's.....	2,550 pairs.....	.16	92	Do.
<b>Belts, leather:</b>				
Boys'.....	25 dozen.....	1.75	98	Do.
Men's.....	27 dozen.....	1.86	92	Do.

## NOTIONS.

[Bids opened in Chicago Apr. 29, 1918.]

<b>Braid, dress:</b>				
Worsted, black—				
¾-inch.....	3,404 yards¹.....	\$0.004	71	Chicago.
1-inch.....	850 yards.....	.02½	252	New York.
¾-inch.....	344 yards.....	.02½	252	Do.
White—				
¾-inch.....	No award.....			
1-inch.....	do.....			
Cardinal, worsted, ¾-inch.....	No bid.....			
<b>Brushes:</b>				
Hair.....	242 dozen¹.....	2.80	122	St. Louis or Chicago.
Tooth—				
For children.....	963 dozen¹.....	.92	160	New York.
For adults.....	1,133 dozen.....	1.32	92	Do.
<b>Buttons:</b>				
Dress—				
Vegetable ivory, 24-line.....	118 gross¹.....	.96	71	Chicago.
Smoked, pearl, 24-line.....	831 gross.....	.39	280	La Crosse, Wis.
Pearl, 24-line.....	1,185 gross.....	.23	181	Chicago.
Shirt, bone—				
18-line.....	509 gross¹.....	.28	160	New York.
20-line.....	681 gross.....	.29	160	Do.
Shirt, pearl, 16-line.....	353 gross.....	.18	181	Chicago.
Bone, 28-line.....	530 gross¹.....	.40	160	New York.

¹ Only.

² Size 7, rise \$0.10; every whole and half size.

## NOTIONS—Continued.

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Collars, military, white, rubber or celluloid, sizes 12 to 17 inches.	2,338 <sup>1</sup> .....	\$0.098	78	Chicago.
Clamps for fastening rubber or celluloid collars to uniform coats.	No bid.....			
Combs:				
Coarse, dressing—				
Girls'.....	1,001 dozen.....	1.00	3	Chicago.
Boys'.....	579 dozen.....	.67	3	Do.
Fine aluminum.....	761 dozen.....	.80	3	Do.
Cotton:				
Darning, No. 2, 8-ply—				
Black, fast color.....	1,377 dozen spools.....	.20	78	Do.
White.....	164 dozen spools.....	.20	78	Do.
Gray.....	234 dozen spools.....	.20	78	Do.
Tan.....	15 dozen spools.....	.20	78	Do.
Spool, best of standard 6-cord, Nos. 20 to 100, white and black, 200 yards to the spool.	7,739 dozen spools. <sup>1</sup> .....	.49	71	Do.
Emeries, strawberry.....	58.....	.08	78	Do.
Hooks and eyes, brass, white and black, Nos. 2, 3, and 4.	498 gross.....	{ .15 .17 .795	11	Dayton, Ohio.
Indelible ink.....	235 dozen.....		78	Chicago.
Laces, shoe:				
Leather, 36-inch.....	6 gross <sup>1</sup> .....	3.15	160	New York.
Tubular, 4/4, black.....	792 gross <sup>1</sup> .....	1.39	122	St. Louis or Chicago.
Needles:				
No. 5, Sharp's.....	538 hundred.....	.2475	11	Dayton, Ohio.
No. 6, Sharp's.....	554 hundred.....	.2475	11	Do.
No. 7, Sharp's.....	408 hundred.....	.2475	11	Do.
Darning, small size.....	725 hundred <sup>1</sup> .....	.40	11	Do.
284 hundred.....		.65	98	New York.
Paper, toilet, round, roll of 1,000 sheets.	96,687 rolls.....	.094	36	Omaha.
Paper holders, toilet (for round rolls).	331 <sup>1</sup> .....	.08	122	St. Louis or Chicago.
Pins, brass, 300 pins to the paper:				
M. C.....	220 packages <sup>1</sup> .....	.674	78	Chicago.
S. C.....	186 packages <sup>1</sup> .....	.624	78	Do.
F. 34.....	104 packages <sup>1</sup> .....	.574	78	Do.
Pins, hat, girls' black heads, steel, about 7 1/2 inches.	22 dozen.....	.15	284	Do.
Pins, hair, wire, crinkled.....	500 pounds <sup>1</sup> .....	1.194	71	Do.
Pins, safety, brass:				
1-inch.....	232 gross <sup>1</sup> .....	.274	78	Do.
1 1/2-inch.....	312 gross <sup>1</sup> .....	.35	78	Do.
2-inch.....	342 gross <sup>1</sup> .....	.51	78	Do.
Ribbon, all silk, white, black, cardinal, navy and light blue:				
2-inch.....	7,799 yards <sup>1</sup> .....	.104	71	Do.
4-inch.....	7,660 yards <sup>1</sup> .....	.135	78	Do.
Scissors, buttonhole.....	244 pairs.....	.22	227	St. Louis.
Silk, sewing, No. A, 50-yard spools:				
Cardinal.....	40 dozen.....	.474	110	New York or Chicago.
Black.....	217 dozen <sup>1</sup> .....	.50	78	Chicago.
Tape measures, medium.....	65 dozen.....	.25	284	Do.
Tape, white, cotton:				
1-inch.....	No bid.....			
1 1/2-inch.....	.....do.....			
1-inch.....	.....do.....			
1 1/2-inch.....	.....do.....			
Tape, elastic, black:				
1-inch.....	262 yards <sup>1</sup> .....	.014	78	Do.
1-inch.....	2,400 yards.....	.039	218	Do.
1-inch.....	13,065 yards.....	.064	218	Do.
Thimbles, steel, sizes 5, 6, 7, and 8:				
Closed.....	409 dozen <sup>1</sup> .....	.095	122	St. Louis or Chicago.
Open.....	48 dozen <sup>1</sup> .....	.095	122	Do.
Thread, linen, dark blue, and unbleached, 200 yards to the spool:				
No. 30.....	No award.....			
No. 35.....	.....do.....			
No. 40.....	.....do.....			

<sup>1</sup> Only.<sup>1</sup> In bulk.<sup>1</sup> Carded.<sup>1</sup> Per package.

## HATS AND CAPS.

[Bids opened in Chicago Apr. 26, 1918.]

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Caps:</b>				
With ear covers, corduroy, winter wear, assorted sizes—				
Boys'.....	2,408.....	\$0.43	92	New York.
Men's.....	1,475.....	.43	92	Do.
Military, woolen, "forestry green," boys' and men's, assorted sizes.	1,833.....	1.65	261	Do.
Military, woolen, navy blue, boys' and men's, assorted sizes.	446.....	1.47	261	Do.
Military, khaki, olive drab, boys' and men's, assorted sizes.	572.....	1.07	261	Do.
Caps, stocking, for small boys and girls.....	3,820 <sup>1</sup> .....	.875	78	Chicago.
<b>Hats, military, assorted sizes:</b>				
Boys', soft felt, tan color.....	1,231 <sup>2</sup> .....	.87	122	Chicago or St. Louis.
Boys', khaki, olive drab.....	1,142.....	.61	108	New York.
Men's, soft felt, tan color.....	814 <sup>2</sup> .....	1.02	122	Chicago or St. Louis.
Men's, khaki, olive drab.....	1,175.....	.62	7	St. Louis.
Men's, police, soft felt, tan color.....	298 <sup>2</sup> .....	1.39	122	Chicago or St. Louis.
Men's, police, khaki, olive drab.....	73.....	.65	108	New York.
<b>Hats, straw, Mexican, assorted sizes, for boys and girls, farm use.</b>	286 <sup>2</sup> .....	4.18 2.20 1.19	35	St. Louis.

## CLOTHING, ETC.

[Bids opened in Chicago Apr. 27, 1918.]

<b>CORDUROY CLOTHING FOR SCHOOLS.</b>				
Coats, double-breasted, sizes 24½ to 26½ chest measure.	1,995 <sup>2</sup> .....	\$3.52	55	New York.
Coats, single-breasted:				
Sizes 29 to 35 chest measure.....	3,683 <sup>2</sup> .....	5.13	55	Do.
Sizes 36 to 48 chest measure.....	1,041 <sup>2</sup> .....	6.38	55	Do.
Trousers, knee, 26 to 28 waist.....	3,104 pairs <sup>2</sup> .....	1.78	55	Do.
Trousers, long:				
24½ to 27 waist, 20 to 26 inseam.....	702 pairs <sup>2</sup> .....	2.72	55	Do.
27½ to 32 waist, 27 to 33 inseam.....	4,794 pairs <sup>2</sup> .....	3.41	55	Do.
33 to 46 waist, 31 to 34 inseam.....	2,113 pairs <sup>2</sup> .....	3.89	55	Do.
<b>CORDUROY CLOTHING—POLICE.</b>				
Coats, single-breasted, for officers.....	54 <sup>2</sup> .....	6.90	55	New York.
Coats, single-breasted, for privates.....	808 <sup>2</sup> .....	6.70	55	Do.
Trousers, men's, for officers and privates.....	441 pairs <sup>2</sup> .....	4.04	55	Do.
Waistcoats, men's, for officers and privates.....	167.....	2.39	144	Chicago.
<b>OLIVE-DRAB COTTON (KHAKI) CLOTHING—SCHOOL UNIFORMS.</b>				
Coats, single-breasted:				
Sizes 24½ to 26½ chest measure.....	262 <sup>2</sup> .....	2.53	55	New York.
Sizes 28 to 35 chest measure.....	1,108 <sup>2</sup> .....	3.59	55	Do.
Sizes 36 to 48 chest measure.....	462.....	4.27	144	Chicago.
Trousers, knee, 26 to 28 waist.....	423 pairs.....	1.03	144	Do.
Trousers, long:				
24½ to 27 waist, 20 to 26 inseam.....	88 pairs.....	1.51	144	Do.
27½ to 32 waist, 27 to 33 inseam.....	1,213 pairs.....	1.76	144	Do.
33 to 46 waist, 31 to 34 inseam.....	566 pairs.....	2.05	144	Do.
<b>OLIVE-DRAB COTTON (KHAKI) CLOTHING—POLICE.</b>				
Coats, single-breasted, for officers.....	43 <sup>2</sup> .....	3.90	55	New York.
Coats, single-breasted, for privates.....	271 <sup>2</sup> .....	3.70	55	Do.
Trousers, men's, for officers and privates.....	367 pairs.....	2.14	144	Chicago.
Waistcoats, men's, for officers and privates.....	150.....	1.77	144	Do.

<sup>1</sup> With genuine leather visor and strap. Will allow 10 cents per cap without braids.<sup>2</sup> Only.<sup>3</sup> Add 1 cent per hat for quantity called for.<sup>4</sup> For girls.<sup>5</sup> For points in Southwest.<sup>6</sup> For boys elsewhere.



## CLOTHING, ETC.—Continued.

Articles.	Quantity awarded.	Unit price.	No. of con- trac- tor.	Point of delivery.
CLOTHING, BLUE DENIM.				
Overalls, with bib:				
24½ to 27 waist, 20 to 26 inseam .....	No award .....			
27½ to 32 waist, 27 to 33 inseam .....				
33 to 46 waist, 31 to 34 inseam .....				
Jumpers:				
Sizes 29 to 36 chest measure .....	do. ....			
Sizes 36 to 48 chest measure .....				
WHITE DUCK CLOTHING.				
Coats, sizes 28 to 48 chest measure .....	362 1 .....	\$1.50	209	Chicago.
Aprons .....	663 1 .....	.50	209	Do.
SHIRTS.				
Chambray, as per standard sample:				
Boys, assorted sizes, 11 to 14½ inch neck measure.	No award .....			
Men's, assorted sizes, 15 to 18 inch neck measure.				
Fancy flannel, regular style .....				
Boys, assorted sizes, 11 to 14½ inch neck measure.	1,148 1 .....	1.17	55	New York.
	1,896 .....	1.19	180	San Francisco.
Men's, assorted sizes, 15 to 18 inch neck measure.	2,152 1 .....	1.17	55	New York.
PIECE GOODS.				
Kersey, all wool, navy blue:				
Winter weight .....	No award .....			
Summer weight .....				
Cloth, all wool, "forestry green" shade:				
Winter weight .....	40 yards 1 .....	4.75	55	New York.
Summer weight .....	207 yards 1 .....	4.00	55	Do.
Cloth (khaki), cotton, olive drab .....	85 yards 1 .....	.45	55	Do.
Corduroy, drab, weight 12½ to 13½ ounces per yard.	276 yards 1 .....	1.05	55	Do.
Denim, indigo blue .....	No award .....			
DUCK REEFER COATS.				
Reefer coats, mode duck, sheep-lined, double- breasted, corduroy collar, oiled sleeve lin- ing of good quality, sizes 32 to 48.	331 .....	9.25	30	Omaha.
Reefer coats, as above, except sheep lining omitted and lamb fabric "Nu-back," or other equally satisfactory lining substi- tuted therefor.				
TAILOR'S TRIMMINGS.				
Lining, fancy khaki cloth .....	80 yards 1 .....	.40	55	New York.
Sateen, black or Italian cloth, 32-inch .....	1,684 yards 1 .....	.50	55	Do.
Sateen, dark brown .....	120 yards 1 .....	.40	78	Chicago.
Sleeve lining, twilled, 40-inch .....	No award .....			
Drilling, or corset jeans, slate color, 27-28 inches .....	do. ....			
Haircloth, 16-inch .....	do. ....			
Canvas, tailor's unbleached, 23-inch .....	200 yards .....	.36	47	New York.
Wadding, cotton, slate color .....	No award .....			
Wigan, black .....	do. ....			
Buttons:				
Overcoat, black, vegetable ivory—				
40-line .....	1 gross .....	2.00	47	Do.
50-line .....	5½ gross .....	4.25	47	Do.
Coat—				
Black, vegetable ivory, 30-line .....	68½ gross .....	.75	47	Do.
Bronze, Indian Service, 36-line .....	29 gross 1 .....	2.50	55	Do.
Vest—				
Bronze, Indian Service, 24-line .....	2 gross 1 .....	1.25	55	Do.
Black, vegetable ivory .....	9 gross .....	.60	47	Do.
Trousers, metal—				
Suspender .....	231 gross .....	.11½	47	Do.
Fly .....	193 gross .....	.104	47	Do.
Tissue, rubber, tailor's, 1½ and 1½ inches wide .....	30 1-lb. spools .....	1.00	47	Do.
Twist, buttonhole silk, No. 8, 1½-ounce spools .....	82 ounces .....	.654	26	Chicago.
Hooks and eyes, trousers .....	13 gross .....	.27	47	New York.

BOOTS AND SHOES, ETC.

[Bids opened in St. Louis May 13, 1912.]

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Boots, rubber, sizes 5 to 12.....	No bid.....			
Overshoes, arctic, 4 buckles:				
Boys', sizes 1 to 6.....	1,399 pairs.....	\$1.84	201	St. Paul, Minn.
Misses', sizes 11 to 2.....	No bid.....			
Women's, sizes 3 to 8.....	do.....			
Men's, sizes 7 to 13.....	767 pairs.....	2.10	201	Do.
Overshoes, rubber, storm:				
Boys', sizes 1 to 6.....	603 pairs.....	.68	201	Do.
Misses' sizes 11 to 2.....	286 pairs.....	.52	201	Do.
Women's, sizes 3 to 8.....	773 pairs.....	.67	201	Do.
Men's, sizes 7 to 13.....	294 pairs.....	.83	201	Do.
Shoes (for dry climates):				
Little gents', sizes 9 to 12.....	568 pairs <sup>1</sup> .....	1.70	74	St. Louis.
Youths', sizes 12½ to 2.....	2,537 pairs <sup>1</sup> .....	1.94	74	Do.
Boys', sizes 2½ to 5½.....	6,379 pairs <sup>1</sup> .....	2.14	74	Do.
Men's, sizes 6 to 13.....	6,630 pairs <sup>1</sup> .....	2.54	74	Do.
Children's, sizes 5 to 8.....	91 pairs <sup>1</sup> .....	1.26	74	Do.
Children's, sizes 8½ to 11½.....	727 pairs <sup>1</sup> .....	1.51	74	Do.
Misses', sizes 12 to 2.....	3,625 pairs <sup>1</sup> .....	1.82	74	Do.
Women's, sizes 2½ to 8.....	5,933 pairs <sup>1</sup> .....	2.08	74	Do.
Shoes (for wet climates):				
Little gents', sizes 9 to 12.....	332 pairs <sup>1</sup> .....	1.72	74	Do.
Youths', sizes 12½ to 2.....	2,394 pairs <sup>1</sup> .....	1.96	74	Do.
Boys', sizes 2½ to 5½.....	5,571 pairs <sup>1</sup> .....	2.16	74	Do.
Men's, sizes 6 to 13.....	3,325 pairs <sup>1</sup> .....	2.57	74	Do.
Children's—				
Sizes 5 to 8.....	( <sup>2</sup> ).....			
Sizes 8½ to 11½.....	614 pairs <sup>1</sup> .....	1.53	74	Do.
Misses', sizes 12 to 2.....	3,510 pairs <sup>1</sup> .....	1.84	74	Do.
Women's, sizes 2½ to 8.....	5,127 pairs <sup>1</sup> .....	2.10	74	Do.
Shoes, gray, lace or button, canvas, leather soles:				
Little gents', sizes 9 to 12.....	4,834 pairs.....	1.40	119	Do.
Youths', sizes 12½ to 2.....		1.50	119	Do.
Boys', sizes 2½ to 5½.....		1.75	119	Do.
Men's, sizes 6 to 13.....		1.95	119	Do.
Children's, sizes 5 to 8.....		2.05	119	Do.
Children's, sizes 8½ to 11½.....		1.20	119	Do.
Misses', sizes 12 to 2.....		1.40	119	Do.
Women's, sizes 2½ to 8.....		1.55	119	Do.
		1.85	119	Do.
Oxfords, gray, canvas with leather soles:				
Little gents', sizes 9 to 12.....	480 pairs.....	1.30	119	Do.
Youths', sizes 12½ to 2.....		1.45	119	Do.
Boys', sizes 2½ to 5½.....		1.70	119	Do.
Men's, sizes 6 to 13.....		1.85	119	Do.
Children's, sizes 5 to 8.....		1.95	119	Do.
Children's, sizes 8½ to 11½.....		1.06	119	Do.
Misses', sizes 12 to 2.....		1.30	119	Do.
Women's, sizes 2½ to 8.....		1.45	119	Do.
		1.60	119	Do.

<sup>1</sup> Only.

<sup>2</sup> Added to shoes (dry climate), children's, sizes 5 to 8.

<sup>3</sup> M "Rinex" fiber soles are ordered.

## CHINAWARE, ENAMELWARE, LAMPS, ETC.

Articles.	Bids opened in Chicago Apr. 17, 1918.				Bids opened in San Francisco June 21, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
White enameled ware, as follows:								
Chambers, with covers:								
Pitchers, water—	60 <sup>1</sup> .....	\$0.78	121	Chicago.....	No award.....			
2-quart.....								
3-quart.....	245 <sup>1</sup> .....	.66	121	do.....	do.....			
Pitchers, washbowl, 5-quart.....	445 <sup>1</sup> .....	.875	121	do.....	21 <sup>1</sup> .....	\$1.40	124	San Francisco.
Washbowl.....	124 <sup>1</sup> .....	1.44	121	do.....				
154 inches in diameter.....	91 <sup>1</sup> .....	.66	121	do.....	No award.....			
14 inches in diameter.....	51 <sup>1</sup> .....	.81	121	do.....	21 <sup>1</sup> .....	.64	124	Do.
12 inches in diameter.....	70 <sup>1</sup> .....	.845	121	do.....				
China ware, vitrified, hotel.....	(?).....							
China ware, semi vitreous, hotel:								
Bowls, soup—								
1-pint.....	253 dozen.....	2.95	20	Chicago.....				
1½-pint.....	69 dozen.....	1.80	219	St. Louis.....				
Cups, coffee, with handle.....	946 dozen.....	2.00	20	Chicago.....				
Cups, coffee, without handle.....	474 dozen.....	1.63	20	do.....				
Dishes, meat—								
About 15 inches.....	568.....	.643	219	St. Louis.....	No award. Total			
About 17 inches.....	121.....	.913	219	do.....	quantity for en-			
Dishes, vegetable, oval, about 12 inches, without covers.....	1,738.....	.375	219	do.....	three service per-			
Pitchers—					chased in and			
Pint.....	339.....	.20	219	do.....	Chicago awards.			
Quart.....	602.....	.533	219	do.....				
Plates—								
Dinner, about 9½ inches.....	796 dozen.....	2.10	219	do.....				
Tea, about 7½ inches.....	75 dozen.....	1.48	219	do.....				
Sauce, about 5½ inches.....	446 dozen.....	.94	219	do.....				
Soup, about 9 inches.....	27 dozen.....	2.00	219	do.....				
Sauces, coffee.....	604 dozen.....	1.10	219	do.....				
Burners, lamp, heavy, Sun—								
No. 1.....	1 dozen <sup>1</sup> .....	.89	121	Chicago.....	No award			
No. 2.....	17½ dozen <sup>1</sup> .....	1.07	121	do.....	9 dozen <sup>1</sup> .....	1.20	124	Do.
Crocks, with covers, stoneware, acid fruit glass lining—								
1-gallon.....	44.....	.20	275	St. Louis.....				
2-gallon.....	136.....	.30	275	do.....	94.....	(?)		
3-gallon.....	196.....	.45	275	do.....				
Crusts, vinegar, glass.....	23 dozen.....	1.20	20	Chicago.....	2 dozen <sup>1</sup> .....	1.35	219	St. Louis.

	1.10	121	do.	3 dozen !	1.85	219	Do.
Lanterns, tubular, safety No. 0.....	.65	121	do.	No award			San Francisco.
Tubular street lamps No. 3, standard 1-quart.....		121	do.		.833	139	Do.
Jars, fruit, complete: 1-quart.....					1.16	139	Do.
2-quart.....							Do.
Rubbers, for fruit jars: For 1-quart.....					.066	139	Do.
For 2-quart.....					.066	139	Do.
Tops for fruit jars: For 1-quart.....	.19	275	St. Louis.	54 dozen.	( <sup>2</sup> )		
For 2-quart.....	.19	275	do.	26 dozen	( <sup>2</sup> )		
Lamp shades: Metal, for Mammoth hanging lamps, 20 inches.....				No award			
Porcelain, 7-inch, for student's lamps.....	.13	275	St. Louis.	16!	.25	219	St. Louis.
Lamps: Bracket, heavy, metal, with cup and thumb- screw for reflector, complete, with glass fount, No. 2 Sun burner and chimney. Hall, hanging, extension, complete with 10- inch frosted globe, No. 2 fount, No. 2 Sun burner and chimney. Table No. 4, B. and H. Radiant, nickel- plated, complete with 10-inch opal dome shade, holder, burner, and chimney. Student's Perfection, No. 1, complete with opal shade and chimney. Hanging, Mammoth, No. 5 B. and H. Rad- iant, complete— With 20-inch metal shade, burner, and chimney. With 14-inch opal dome shade, burner, and chimney. Street, tubular, globe No. 3, with burner, complete.	.77	121	Chicago.	No award	.85	219	Do.
				No award			
	2.83	121	Chicago.	44.	2.85	189	San Francisco.
				No award			
				do.			
	4.55	121	Chicago.	do.			
	4.95	121	do.	do.			
				do.			
	1.25	121	do.	14 dozen !	1.16	219	St. Louis.
	1.30	121	do.	12 dozen !	1.25	219	Do.
	1.55	121	do.	1 dozen !	1.50	219	Do.
	No award.			12 dozen !	3.75	27	San Francisco.
				67 dozen !	8.75	219	St. Louis.
				No award	1.50		
				do.			
	1.40	121	Chicago.	14 dozen !	1.75	27	San Francisco.

**Purchased under Chicago contract—25 per cent clause.**

Added to china ware, semi vitreous.

Only.

## CHINAWARE, ENAMELWARE, LAMPS, ETC.—Continued.

Articles.	Bids opened in Chicago Apr. 17, 1918.				Bids opened in San Francisco June 21, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Lamp wicks:								
No. 0.....	3 dozen 1.....	\$0.04.....	121	Chicago.....				
No. 1.....	26 dozen 1.....	.05.....	121	do.....				
No. 2.....	146 dozen 1.....	.06.....	121	do.....				
For Perfection No. 1, student's lamp	No award.....				No award.....			
For tubular street lamps No. 3.....	do.....							
For No. 98 B. and H. Mammoth lamps	do.....							
For No. 2 B. and H. lamps.....	do.....							
For No. 5 B. and H. Radiant lamps	do.....							
For No. 4 B. and H. Radiant lamps	do.....							
Lanterns, tubular, safety.....	278 1.....	.60.....	121	Chicago.....	49 1.....	\$0.50.....	124	San Francisco.
Pepper sprinklers, glass.....	122 dozen.....	.65.....	219	St. Louis.....	84 dozen 1.....	.75.....	219	St. Louis.
Pitchers, sirup, pint, glass, removable metal top.	67 dozen.....	2.00.....	219	do.....	24 dozen 1.....	2.20.....	219	Do.
Reflectors, lamp, to match bracket lamps, 8-inch glass.	15 1.....	.30.....	121	Chicago.....	36 1.....	.42.....	219	Do.
Tumblers, glass.....	497 dozen.....	.60.....	29	do.....	146 dozen.....	.75.....	70	San Francisco.

1 Only.

FURNITURE AND WOODENWARE.

Articles.	Bids opened in St. Louis May 7, 1913.				Bids opened in San Francisco June 21, 1913.			
	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.
Bedsteads:								
Clothes large.....	546.....	\$1.50.....	134.....	St. Louis.....	138.....	(1).....	.....	.....
Measuring.....	23 1/2.....	.53.....	121.....	Chicago.....	No award.....	.....	.....	.....
1 bushel.....	63 1/2.....	.84.....	121.....	do.....	do.....	.....	.....	.....
Bedsteads iron:								
Double with iron feet, white enameled.....	132 1/2.....	10.25.....	84.....	St. Louis.....	45.....	10.10.....	232.....	San Francisco.
Single, with casters, height from floor 27 inches, with rod across foot piece for a clothes hanger, white enamel.....	38 1/2.....	7.75.....	84.....	do.....	No award.....	.....	.....	.....
Single, with casters, height from floor 17 inches, with rod across foot piece for a clothes hanger, white enamel.....	16 1/2.....	7.75.....	84.....	do.....	19.....	8.50.....	232.....	Do.
Single, with iron feet, height from floor 27 inches, with rod across foot piece for a clothes hanger, white enamel.....	23 1/2.....	7.75.....	84.....	do.....	No award.....	.....	.....	.....
Single, with iron feet, height from floor 17 inches, with rod across foot piece for a clothes hanger, white enamel.....	98 1/2.....	7.75.....	84.....	do.....	135.....	8.40.....	232.....	Do.
Extra springs for—								
Double.....	9 1/2.....	1.75.....	84.....	do.....	No award.....	.....	.....	.....
Single.....	72 1/2.....	1.40.....	84.....	do.....	10.....	(1).....	.....	.....
Bowls, wooden, chopping, round:								
14-inch.....	29 1/2.....	.35.....	122.....	do.....	3.....	.40.....	9.....	Do.
17-inch.....	30 1/2.....	.92.....	121.....	Chicago.....	1.....	1.05.....	9.....	Do.
Brooms:								
Household.....	828 dozen.....	9.75.....	217.....	St. Louis.....	243 dozen 1.....	8.43.....	139.....	Do.
Whisk.....	60 dozen 2.....	1.45.....	121.....	Chicago.....	25 dozen.....	3.50.....	9.....	Do.
Brushes:								
Scrub, 6-row, 10-inch.....	No award.....	.....	.....	.....	26 dozen.....	1.25.....	9.....	Do.
Shoe—								
Dauber.....	do.....	.....	.....	.....	No award.....	.....	.....	.....
Polishing.....	58 dozen 2.....	1.80.....	121.....	Chicago.....	do.....	.....	.....	.....
Stove, 6-row, 10-inch.....	11 dozen 2.....	1.35.....	122.....	St. Louis.....	5 dozen.....	1.50.....	9.....	Do.
Floor, 10 inches wide, with long handle.....	308 1/2.....	.82.....	121.....	Chicago.....	228.....	1.20.....	9.....	Do.
Buckets, well, oak.....	No award.....	.....	.....	.....	No award.....	.....	.....	.....
Bureaus, with glass.....	73.....	12.31.....	222.....	St. Louis.....	19.....	(1).....	.....	.....

1 Purchased under St. Louis contract, 25 per cent clause.

2 Only.

3 Additional order subject to contractor's option.

## FURNITURE AND WOODENWARE—Continued

Articles.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 21, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Chairs:								
Hickory or other hardwood, for outside use.	No award.				No award.			
Typewriter, oak.	17.	\$6.25	53	St. Louis.	53 <sup>1</sup> .	\$3.60	120	San Francisco.
Rocking, oak, inside use.	171.	8.15	53	do.	do.			
Rocking, hickory or other hardwood, for outside use.	No award.				No award.			
Solid oak, long post, wood seat.	524 <sup>1</sup> dozen.	22.80	53	St. Louis.	( <sup>2</sup> ).			
Morris, hickory or other hardwood, for outside use.	No award.				No award.			
Wood, bow back.	42 dozen <sup>1</sup> .	9.00	250	St. Louis.	54 <sup>1</sup> dozen <sup>1</sup> .	16.20	273	Do.
Dining, oak.	( <sup>4</sup> ).				24 <sup>1</sup> .	2.14	120	Do.
Office, revolving and tilting.	14 <sup>1</sup> .	6.80	146	St. Louis.	4 <sup>1</sup> .	7.15	273	Do.
Chiffoniers, oak, without glass.	45.	9.98	222	do.	10.	( <sup>5</sup> ).		
Churns, barrel, revolving, large enough to churn 5 gallons.	13 <sup>1</sup> .	3.00	121	Chicago.	No award.			
Clocks, 8-day.	67 <sup>1</sup> .	3.88	121	do.	22 <sup>1</sup> .	4.96	273	Do.
Clothesline, galvanized wire, in lengths of 100 feet, per 100 feet.	12,100 feet <sup>1</sup> .	.83	121	do.	No award.			
Clothespins, spring.	847 gross <sup>1</sup> .	.58	121	do.	108 gross.	{ 5.40 5.40 }	120	Do.
Coat hangers, heavy wire.	91 dozen <sup>1</sup> .	.45	122	St. Louis.	22 dozen.	( <sup>5</sup> ).		
Deaks, medium size:								
Office.	10 <sup>1</sup> .	15.00	146	do.	2 <sup>1</sup> .	26.50	120	Do.
Teachers.	3 <sup>1</sup> .	8.50	146	do.	1 <sup>1</sup> .	17.75	273	Do.
Dusters, counter, bristle or horsehair.	78 dozen <sup>1</sup> .	2.15	68	do.	24 <sup>1</sup> dozen.	3.75	9	Do.
Linedrum.	No award.				563 square yards <sup>1</sup> .	1.75	10	Los Angeles.
Matting:								
Rubber, 36 inches wide, corrugated, $\frac{1}{8}$ inch thick.	472 yards.	1.12	245	Cambridge, Mass.	48 yards.	1.25	100	St. Louis.
Cocoa, reversible, 36 inches wide; weight per yard, 42 ounces.	210 yards.	.755	245	Warefield, Mass.	10 yards <sup>1</sup> .	1.06	10	Los Angeles.
Machines, sewing:								
"Family," with cover and accessories.	40.	18.80	279	Chicago.	45.	18.80	279	Chicago.
Tailors, with attachments.	279.	24.00	121	do.	No award.			
Mats, door, steel, 18 by 30 inches.	44.	.68	121	do.	24 <sup>1</sup> .	.99	124	San Francisco.
Mattresses:								
Double.	244 <sup>1</sup> .	7.75	250	St. Louis.	75 <sup>1</sup> .	7.25	10	Los Angeles.
Single.	700 <sup>1</sup> .	6.00	250	do.	363 <sup>1</sup> .	5.99	10	Do.
Measures:								
1-peck.	21 <sup>1</sup> .	.23	121	Chicago.	No award.			
$\frac{1}{2}$ -bushel.	1 <sup>1</sup> .	.25	121	do.	do.			

	No. sold.	Price per unit.	Description.	Quantity.	Unit price.	Total value.	Remarks.
Mirrors, glass, not less than 15 by 18 inches.	No. sold.	1.39	St. Louis.	123	do.	1.80	San Francisco.
Mopsticks.	12 dozen.	1.09	Chicago.	228	No. sold.	.18	Do.
Pails, wood, heavy, stable pattern.	No. sold.	1.15	St. Louis.	166	41	124	Do.
Pillows, 20 by 30 inches.	510.						
Rolling-pins, 12 by 2½ inches, exclusive of handle.	371.						
Rope, manila:							
1-inch.	1,137 pounds.	32	Peoria, Ill.	198	405 pounds.	34	Do.
1½-inch.	3,125 pounds.	31½	do.	198	960 pounds.	335	Do.
2-inch.	1,270 pounds.	31	do.	198	405 pounds.	335	Do.
2½-inch.	2,083 pounds.	31	do.	198	705 pounds.	33	Do.
3-inch.	1,750 pounds.	31	do.	198	275 pounds.	33	Do.
4-inch.	575 pounds.	31	do.	198	200 pounds.	33	Do.
Settees, hickory or other hardwood, for outside use.	No. sold.				No. sold.		
Sash cord, braided cotton, ¼-inch diameter.	900 pounds.	53	Philadelphia.	245	455 pounds.	57	Do.
Stools, wood.	44 dozen.	9.75	St. Louis.	166	24 dozen.	11.64	Do.
Tables:							
Typewriter.	No. sold.				47	5.95	Do.
Dining, oak, 6-foot extension; square corners.	37.	8.94	St. Louis.	223	10.	(1)	
Oak—							
About 30 by 40 inches.	No. sold.				No. sold.		
About 24 by 32 inches.							
Washboards, double, zinc:							
Family size, 10 by 1½ inches.	2251.	28	St. Louis.	166	53	.55	Do.
Laundry size, 14 by 13 inches.	1401.	41	do.	122	No. sold.		
Washstands, wood.	6.	5.44	do.	223	7.	(1)	
Washing machines, for clothes, extra heavy.	26.	(*)	do.	187			
Washtrubs, wood:							
24½ inches in diameter by 9½ inches deep,							
inside measurement.	No. sold.				No. sold.		
23 inches in diameter by 10½ inches deep,							
inside measurement.							
25 inches in diameter by 11½ inches deep,							
inside measurement.							
Wringers, clothes, rolls 12 by 1½ inches.	561.	3.48	Chicago.	121	121.	4.65	Do.

Only

<sup>2</sup> Added to dining. oak. chairs.

- Added to solid oak chairs.

\* Purchased under St. Louis contract, 25 per cent clause.

• Packed 12 gross in pulp case (3 dozen to small carton).

\*Packed in smaller lots, four 3-dozen cartons in paper.

7 Additional order subject to contractor's option.

<sup>s</sup>F. o. b. New York, \$11.25; St. Louis, Mo., \$10.50; Omaha,

I, Oreg., \$12; Seattle, Wash., \$12; Newton, Iowa, \$9.90.

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## HARNESS, LEATHER, SHOE FINDINGS, SADDLERY, ETC.

Articles.	Bids opened in St. Louis May 9, 1918.				Bids opened in San Francisco June 17, 1918.			
	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.
Awl hafts, patent: Pegging.....	1 dozen.....	\$0.65	121	Chicago.....	5½ dozen.....	\$0.80	9	San Francisco.
Sewing—								
Harness, white, common, patent screw.	1 dozen.....	.65	121	.....do.....	1½ dozen.....	.75	9	Do.
Shoemakers.....	No award.....				9½ dozen.....	1.22	67	Do.
Awls, assorted:								
Patent, pegging.....	21½ dozen.....	.12	121	Chicago.....	20 dozen.....	.14	86	Do.
Regular harness, sewing.....	27 dozen.....	.35	125	St. Louis.....	42 dozen.....	.36	86	Do.
Patent, sewing, regular shoemaker's bent No. 9.	No award.....				60½ dozen.....	.20	9	Do.
Round, pad, shouldered, with riveted handles.	1 dozen.....	3.00	227	St. Louis.....	No award.....			
Saddler's collar, with riveted handles.	1 dozen.....	5.25	227	.....do.....	1 dozen.....	2.25	9	Do.
Bits, loose-ring, japanned, 2½-inch, heavy mouthpieces:								
Jointed:								
Stiff.....	13½ dozen.....	1.02	125	.....do.....	3½ dozen.....	(*)		
Blacking, shoe.....	2½ dozen.....	1.00	125	.....do.....	No award.....			
Paste, polish for black shoes.....	6,352 boxes.....	.053	122	.....do.....	1,472 boxes.....	.087	67	Do.
Blankets, horse:	2,459 boxes.....	.046	122	.....do.....	1,244 boxes.....	.085	67	Do.
All wool.....	No award.....				1514.....	5.00	64	Do.
Cotton and wool mixed.....	.....do.....				257.....	4.00	64	Do.
Bridles, riding.....	9.....	2.15	125	St. Louis.....	No award.....			
Brooms, stable, with handles.....	377.....	.50	249	San Francisco.....	206.....	.48	249	Do.
Brushes, horse, leather backs.....	222.....	.89	122	St. Louis.....	64.....	.27	9	Do.
Buckles, bar rein, with roller, japanned:								
1-inch.....	2½ gross.....	1.38	125	.....do.....	No award.....			
1-inch.....	2 gross.....	1.86	125	.....do.....	.....do.....			
1-inch.....	3 gross.....	2.15	125	.....do.....	.....do.....			
1-inch.....	4½ gross.....	2.70	125	.....do.....	2½ gross.....	3.80	64	Do.
No award.....					No award.....			
Buckles, barrel, roller, girth, japanned, 1½-inch.								
Buckles, roller, harness, japanned:								
1-inch.....	1½ gross.....	.84	125	St. Louis.....	1 gross.....	1.15	64	Do.
1-inch.....	5 gross.....	.99	125	.....do.....	2 gross.....	1.40	64	Do.
1-inch.....	1½ gross.....	1.20	125	.....do.....	8 gross.....	1.70	64	Do.
1-inch.....	7 gross.....	1.38	125	.....do.....	8 gross.....	2.00	64	Do.
1-inch.....	7½ gross.....	1.56	125	.....do.....	3 gross.....	2.20	64	Do.
1-inch.....	3½ gross.....	2.25	125	.....do.....	5 gross.....	3.25	64	Do.
1-inch.....	2 gross.....	2.85	125	.....do.....	1 gross.....	4.10	64	Do.
1½-inch.....	1 gross.....	3.43	125	.....do.....	1 gross.....	5.00	64	Do.
2-inch.....	3 gross.....	4.08	125	.....do.....	1 gross.....	6.00	64	Do.

Buckles, roller, trace, 1-spanned: 11-inch.....	1 dozen.....	54	125	do.....	No award.....		
11-inch.....	2 1/2 dozen.....	66	125	do.....	do.....		
Buckles, trace, 3-loop, Champion, 1-spanned: 11-inch.....	1 dozen.....	74	125	do.....	do.....		
11-inch.....	13 dozen.....	83	125	do.....	do.....		
11-inch.....	1 dozen.....	97	125	do.....	do.....		
2-inch.....	do.....	125	125	do.....	do.....		
Cement, leather, 2-ounce bottles.....	15 1/4 dozen.....	1.25	125	Chicago.....	13 dozen.....	1.44	Do.
Cinchas, good quality, web, 3-inch, with center brace of hair.....	31.....	1.00	125	St. Louis.....	2.....	(*)	
Clips, hame, team, polished, 1/2-inch, 2 holes, 4 inches long, wrought iron.....	23 dozen.....	.31	125	do.....	6 dozen.....	(*)	
Cockeys, triangular, with roller, 1-spanned: 11-inch.....	27 1/2 dozen.....	.42	125	do.....	1 dozen.....	(*)	
11-inch.....		.49	125	do.....	34 dozen.....	(*)	
11-inch.....		.57	125	do.....	No award.....		
2-inch.....		.75	125	do.....	2 dozen.....	(*)	
Collars, leather: Horse.....							
17 to 19 inches, by half inches.....	67 1/2.....	2.75	271	Chicago or Omaha.....	60.....	4.50	Do.
19 1/2 to 21 inches, by half inches.....	31 1/2.....	4.00	271	do.....	26.....	4.75	Do.
21 1/2 to 24 inches, by half inches.....	31.....	5.50	271	do.....	12.....	5.25	Do.
Mule, 15 to 16 inches, by half inches.....	27.....	3.50	271	do.....	36.....	4.50	Do.
Currycombs.....	27 dozen.....	2.70	125	St. Louis.....	6 1/2 dozen.....	1.80	Do.
Halters, all leather.....	159.....	2.41	271	Chicago or Omaha.....	No award.....		
Hair, gray goat.....	No award.....			do.....	do.....		
Hames, No. 6, Concord, size 18 to 22 inches, wood, high top, solid steel backs, 1-inch holes, horn back plates and trimmings, as follows: Holt.....	36 pairs.....	1.08	125	St. Louis.....	do.....		
Hook, swivel and ring.....	9 pairs.....	1.08	125	do.....	do.....		
Clip (or staple).....	22 pairs.....	1.08	125	do.....	do.....		
Harness: Double complete, Concord hames— With breeching.....	137 sets.....	53.00	125	do.....	do.....		
With breeching.....	No award.....			do.....	do.....		
Play, double, with backband hip straps, without collars, Concord hames.....	do.....			do.....	16 sets.....	32.90	Do.
Hooks, hame, double repair (weight 4 pounds per dozen).....	1 dozen.....	.55	125	St. Louis.....	No award.....		
Knives: Draw gauge, brass etc.....	2.....	2.90	125	do.....	do.....		
Head, 4 1/2-inch, oval handle.....	2.....	1.00	125	do.....	do.....		
Round, 6 1/2-inch, oval handle.....	1.....	1.50	227	do.....	do.....		
Shoe square point, paring 4-inch blade.....	31 dozen.....	2.25	227	do.....	15 dozen.....	1.43	Do.
Splitting 10-inch, iron frame.....	No award.....			do.....	No award.....		
Straight, harnessmaker's.....	3.....	.80	125	St. Louis.....	do.....		
Laver crossers, octagon, Nos. 1, 2, 3, 4, 5.....					do.....		

\* Additional order subject to contractor's option.  
\* For cold climates.

1 Only.  
\* Purchased under St. Louis contract 25 per cent clause.

## HARNESSE, LEATHER, SHOE FINDINGS, SADDLERY, ETC.—Continued.

Articles.	Bids opened in St. Louis May 9, 1918.				Bids opened in San Francisco June 17, 1918.			
	Quantity awarded.	Unit price.	No. of con- tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of con- tractor.	Point of delivery.
Leather:								
Dongola kid—								
Dull.....	No award				San Francisco			
Glazed.....	4 pounds.....	\$4.75	211	Chicago or St. Louis.....	8 pounds.....	\$4.50	67	San Francisco, Cal.
Calfskin (15 to 20 pounds per skin).....	22 pounds.....	1.65	48	St. Louis.....	2 pounds.....	3.15	67	Do.
Harness, oak-tanned (15 to 20 lbs., per side).....	3,566 pounds.....	.68	145	San Francisco or Ben- city, Cal.....	3,661 pounds.....	.67	86	Do.
Kip (about 5-pound skins).....	6 pounds.....	1.65	48	St. Louis.....	No award			
Lace, Indian tan, to run from 14 to 20 square feet per side (per square foot).....	53 sides.....	.40	126	do.....	123 sides <sup>4</sup>	.445	54	Do.
Sole (18 to 25 pounds per side)—								
Hemlock.....	No award							
Oak.....	4,870.....	.44	86	San Francisco.....	1,200 pounds.....			
Needles, harness assorted, Nos. 4, 5, and 6.....	15 dozen papers <sup>4</sup>	1.92	160	New York.....	26 dozen papers.....	1.35	67	Do.
Nails, saddle, Hungarian, tinned:								
1-inch.....	No award				No award			
1 1/2-inch.....								
Nails, shoe, wire, clinching:								
Size 3-8.....	23 pounds.....	.1525	121	Chicago.....	20 pounds.....	.18	67	Do.
Size 3-8.....	31 pounds.....	.1525	121	do.....	do.....	.18	67	Do.
Size 4-8.....	116 pounds.....	.1525	121	do.....	227 pounds.....	.18	67	Do.
Size 4-8.....	116 pounds.....	.1525	121	do.....	34 pounds.....	.18	67	Do.
Size 5-8.....	308 pounds.....	.1525	121	do.....	284 pounds.....	.18	67	Do.
Size 5-8.....	78 pounds.....	.1525	121	do.....	50 pounds.....	.18	67	Do.
Size 6-8.....	207 pounds.....	.1525	121	do.....	325 pounds.....	.18	67	Do.
Size 6-8.....	32 pounds.....	.1525	121	do.....	5 pounds.....	.18	67	Do.
Size 7-8.....	117 pounds.....	.1525	121	do.....	69 pounds.....	.18	67	Do.
Oil, neat's-foot, for oiling harness, etc.:								
In 1-gallon cans.....	No award				127 <sup>4</sup> .....	.127 <sup>4</sup>	265	Do.
In 5-gallon cans.....	do.....				45 <sup>4</sup> .....	.49	285	Do.
Ornaments, nickel, 1-inch.....	do.....				No award			
Pad screws, 1-inch, japanned.....	do.....				do.....			
Pads, sweat, yellow back, white face, 11-inch draft, 4 hooks, common hair filling:								
For horse collars.....								
For mule collars.....								
Rasps, peg, (or peg break).....	359 <sup>4</sup> .....	( <sup>4</sup> )	122	St. Louis.....	40.....	( <sup>4</sup> )		
Rivets, name, Norway, malleable:	26 <sup>4</sup> .....	( <sup>4</sup> )	122	do.....	4.....	( <sup>4</sup> )		
1-inch.....	No award			No award	No award			
1 1/2-inch.....	6 pounds.....	.16	121	Chicago.....	do.....			
1-inch.....	do.....	.16	121	do.....	do.....			



## HARNES, LEATHER, SHOE FINDINGS, SADDLERY, ETC.—Continued.

Articles.	Bids opened in St. Louis May 9, 1918.				Bids opened in San Francisco June 17, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Tacks, shoe:								
1-ounce.....	49 pounds.....	\$0.27	125	St. Louis.....	17 pounds.....	\$0.27	86	San Francisco.
2-ounce.....	54 pounds.....	.24	125	do.....	do.....	.25	67	Do.
3-ounce.....	88 pounds.....	.24	125	do.....	28 pounds.....	.24	67	Do.
Tags, belt:								
Small size.....	64 bundles.....	.70	121	Chicago.....	17 bundles.....	.80	67	Do.
Medium size.....	93 bundles.....	1.02	121	do.....	30 bundles.....	1.03	67	Do.
Large size.....	43 bundles.....	1.35	121	do.....	6 bundles.....	1.13	67	Do.
Tags, sole:								
Small size.....	No award.....				100 bundles.....	5.20	86	Do.
Medium size.....	do.....				156 bundles.....	5.55	86	Do.
Large size.....	do.....				81 bundles.....	5.90	86	Do.
Terrets, band, X.C.....	do.....				No award.....			Do.
11-inch.....	do.....				do.....			
14-inch.....	do.....				do.....			
Thread:								
Harness, No. 3, black.....	do.....				9 pounds.....	2.65	86	Do.
Shoe, white—								
No. 2.....	do.....				24 pounds.....	2.05	67	Do.
No. 10.....	do.....				65 pounds.....	1.95	67	Do.
Linen, black, machine—								
No. 18.....	do.....				2 dozen spools.....	5.04	86	Do.
No. 40.....	do.....				No award.....			
No. 50.....	do.....				do.....			
Trace, claw, with riveted handle.....	51.....	.47	227	St. Louis.....	do.....			
Trace carriers, 14-inch:								
With breeching.....	1 dozen.....	.85	125	do.....	do.....			
Without breeching.....	do.....	.68	125	do.....	do.....			
Wax, small balls, per 100 balls, summer and winter temperatures:								
Saddler's, black.....	1,340 balls.....	.55	125	do.....	200 balls.....	.98	86	Do.
Shoemaker's, brown.....	30 balls.....	.60	125	do.....	310 balls.....	.98	86	Do.
Wheels, overstretch, stationary, with octagon carriage, Nos. 6, 7, 8, 10, 12, and 14.	No award.....				No award.....			
Winkers, 1-inch, sensible, 2 seams, patent leather.	do.....				do.....			

1 Only.

AGRICULTURAL IMPLEMENTS, ETC.

[Bids opened in Chicago, Apr. 24, 1918.]

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Augers, post hole, 9-inch.....	21 <sup>1</sup> .....	\$0.84	121	Chicago.
Axle grease.....	323 dozen.....	2.475	240	Do.
Bags, cotton for flour:				
38-pound.....	1,210 <sup>1</sup> .....	.29	89	St. Louis.
48-pound.....	1,125.....	.1793	44	
25-pound.....	1,600.....	.1068	44	St. Louis.
Bags, grain, seamless, 24-bushel, not less than 12 pounds per dozen.....	372.....	.575	44	Kansas City or Omaha.
Bags, grain, burlap, 12-ounce.....	13,410.....	.3013	44	
Bush hooks, handled.....	7 <sup>1</sup> .....	.96	121	Chicago.
Corn planters, hand.....	11 <sup>1</sup> .....	.645	121	Do.
Corn shellers, hand, single feed, medium size.....	21.....	9.40	267	Do.
Cradles, grain, 4 finger with scythes.....	4 <sup>1</sup> .....	3.67	227	St. Louis.
Cultivators:				
1 horse, iron frame, 5 blades, with wheel.....	13.....	4.30	235	South Bend, Ind.
Riding, 2 horse.....	10.....	41.00	267	Chicago.
Diggers, post hole.....	46 <sup>1</sup> .....	1.10	121	Do.
Forks:				
Hay, c. s., 4 oval tines, 54-foot handles, strapped ferrule.....	36 <sup>1</sup> / <sub>2</sub> dozen <sup>1</sup> .....	7.53	121	Do.
Manure, c. s., 5 oval tines, strapped ferrule—				
Long handles.....	43 dozen <sup>1</sup> .....	9.05	121	Do.
Short D handles.....	9 dozen <sup>1</sup> .....	9.45	121	Do.
Handles:				
Hayfork 54-foot, crooked shank, without ferrule.....	56 dozen <sup>1</sup> .....	2.14	121	Do.
Flow, 18 by 24 inches by 5 feet—				
Left hand, straight.....	12 dozen (No award).			
Right hand, double bend, for mold board.....	11 dozen (No award).			
Shovel—				
Long.....	47 <sup>1</sup> / <sub>2</sub> dozen <sup>1</sup> .....	2.75	121	Do.
Short D-handle.....	164 dozen <sup>1</sup> .....	3.41	121	Do.
Spade D-handle.....	6 <sup>1</sup> / <sub>2</sub> dozen <sup>1</sup> .....	3.25	121	Do.
Spade, long.....	12 dozen <sup>1</sup> .....	2.40	121	Do.
Harrows:				
60 teeth, 4 by 8 inches, steel, with draw-bar and clevises.....	158.....	13.00	176	Springfield, Ill.
Disk—				
2-horse, eight 16-inch disks.....	2.....	22.70	263	Hosack Falls, N. Y.
3-horse, twelve 16-inch disks.....	1.....	28.00	176	Springfield, Ill.
4-horse, fourteen 16-inch disks.....	5.....	30.00	176	Do.
Hoes:				
Garden, solid socket, c. s., 64-inch.....	86 <sup>1</sup> / <sub>2</sub> dozen <sup>1</sup> .....	5.20	121	Chicago.
Solid forged steel, planter's eye, 74-inch, No. 1, with handle.....	12 <sup>1</sup> / <sub>2</sub> dozen <sup>1</sup> .....	5.85	121	Do.
Grub, c. s., oval eye, No. 2.....	4 <sup>1</sup> / <sub>2</sub> dozen <sup>1</sup> .....	8.10	121	Do.
Knives:				
Corn, c. s., 3 rivets.....	10 dozen <sup>1</sup> .....	2.78	121	Do.
Hay.....	21 <sup>1</sup> .....	.92	121	Do.
Mowers, lawn, hand, 14-inch, ball-bearing.....	83 (No award).			
Machines:				
Mowing—				
44-foot cut.....	4.....	54.75	267	Do.
5-foot cut.....	20.....	55.60	267	Do.
6-foot cut.....	4.....	59.85	267	Do.
Harvester and self-binder, 6-foot cut, complete, with transports.....	5.....	156.50	267	Do.
Mattocks ax, c. s.....	12 dozen <sup>1</sup> .....	10.80	121	Do.
Picks, earth, steel-pointed, assorted, 5 to 6 pounds.....	267 <sup>1</sup> .....	.78	121	Do.
Plows with extra share:				
8-inch, c. s., 1-horse.....	13.....	9.00	176	Springfield, Ill.
10-inch, c. s., 2-horse.....	43.....	11.00	176	Do.
12-inch, c. s., 2-horse.....	151.....	12.00	176	Do.
14-inch, c. s., 2-horse.....	13.....	13.50	176	Do.
Plows:				
Breaker, with either rolling or standing colter, gauge wheel and extra share—				
12-inch.....	1.....	13.50	267	Chicago.
14-inch.....	None wanted.			
Shovel—				
Double.....	No award.			
Single.....	do.			

<sup>1</sup> Only.

<sup>2</sup> For spring trip, add 65 cents per shovel.

## AGRICULTURAL IMPLEMENTS, ETC.—Continued.

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Plow beams:</b>				
For 8-inch plow, 5 feet long.....	No bid.....			
For 10-inch plow, 5½ feet long.....	do.....			
For 12-inch plow, 6 feet long.....	do.....			
For 14-inch plow, 6½ feet long.....	do.....			
For 12-inch "breaker" plow, 6½ feet long.....	do.....			
For 14-inch "breaker" plow, 7 feet long.....	do.....			
<b>Rakes:</b>				
Hay, sulky, 8-foot, hand dump—				
20 teeth.....	None wanted.....			
25 or 26 teeth.....	do.....			
Hay, sulky, 8-foot, self-dump—				
20 teeth.....	4.....	\$29.10	267	Chicago.
25 or 26 teeth.....	None wanted.....			
Hay, sulky, 10-foot, hand-dump—				
25 or 26 teeth.....	do.....			
32 teeth.....	do.....			
Hay, sulky, 10-foot, self-dump—				
26 teeth.....	2.....	32.50	267	Do.
32 teeth.....	7.....	33.75	267	Do.
Hay, wood, 12 teeth, 2 bows.....	2 dozen <sup>1</sup> .....	2.85	121	Do.
Wrought steel, handled, 12 teeth.....	104 dozen <sup>1</sup> .....	5.05	121	Do.
Scoops, grain, medium quality, No. 4.....	163 <sup>1</sup> .....	1.17	121	Do.
<b>Scrapers:</b>				
Drag, 2-horse, with runners.....	27 <sup>1</sup> .....	9.25	121	Do.
Fresno, with runners (without wheels)—				
3½-foot.....	6 <sup>1</sup> .....	21.60	121	Sidney, Ohio
4-foot.....	4 <sup>1</sup> .....	22.80	121	Do.
5-foot.....	3 <sup>1</sup> .....	24.00	121	Do.
<b>Shovels, steel:</b>				
Coal, D-handle.....	259 <sup>1</sup> .....	1.05	121	Chicago.
Long handle, No. 2, round stiff point.....	1,043 <sup>1</sup> .....	1.045	121	Do.
D-handle, No. 2, square point.....	183 <sup>1</sup> .....	.965	121	Do.
Sickles, No. 3, grain.....	38 <sup>1</sup> .....	.25	121	Do.
<b>Scythes:</b>				
Brush, assorted, 21 to 24 inch.....	1½ dozen <sup>1</sup> .....	10.75	121	Do.
Grass, assorted, 34 to 38 inch.....	4 dozen <sup>1</sup> .....	10.50	121	Do.
Weed, 28 and 30 inch.....	2½ dozen <sup>1</sup> .....	10.75	121	Do.
Scythe snaths, patent ring.....	6½ dozen <sup>1</sup> .....	8.32	121	Do.
Scythestones.....	8½ dozen <sup>1</sup> .....	.85	121	Do.
<b>Spades, steel:</b>				
Long handle No. 2.....	110 <sup>1</sup> .....	1.045	121	Do.
D-handle No. 2.....	70 <sup>1</sup> .....	1.045	121	Do.
Twine, binder, long fiber (sisal).....	20,700 pounds.....	.2395	267	Chicago, Auburn, N. Y., St. Paul or Portland, Oreg.
Twine, sack.....	335 pounds.....	.245	92	New York.
<b>Wheelbarrows:</b>				
All iron, tubular.....	49 <sup>1</sup> .....	7.00	121	Chicago.
Garden, wood, No. 2.....	6 <sup>1</sup> .....	3.25	121	Do.

## WAGONS, WAGON FIXTURES, ETC.

[Bids opened in Chicago, Apr. 24, 1918.]

<b>Axletrees, hickory, wagon, for narrow or wide track wagons:</b>				
2½ by 3½.....	4 <sup>1</sup> .....	30.88	277	St. Louis.
2½ by 3½.....	None.....			
2½ by 3½.....	No bid.....			
3 by 4.....	39 <sup>1</sup> .....	1.20	277	Do.
3½ by 4½.....	31 (no bid).....			
3½ by 4½.....	8 (no bid).....			
4 by 5.....	25 <sup>1</sup> .....	2.60	277	Do.
4½ by 5½.....	14 <sup>1</sup> .....	3.10	277	Do.
<b>Bolsters, sand, oak, wagon, narrow track:</b>				
2½ by 3½.....	None.....			
2½ by 4½.....	6 <sup>1</sup> .....	.74	277	Do.
3 by 4½.....	8 <sup>1</sup> .....	1.00	277	Do.
3½ by 5.....	12 (no award).....			
<b>Bolsters, sand, oak, wagon, wide track:</b>				
2½ by 3½.....	38 (no award).....			
2½ by 4½.....	10 <sup>1</sup> .....	.82	277	Do.
3 by 4½.....	28 <sup>1</sup> .....	1.10	277	Do.
3½ by 5.....	13 (no award).....			

<sup>1</sup> Only.

## WAGONS, WAGON FIXTURES, ETC.—Continued.

Articles.	Quantity awarded.	Unit price.	No. of con- tractor.	Point of delivery.
Bolsters, rocker, oak, wagon, front, narrow track:				
2½ by 3½.....	No award.			
2½ by 4½.....	21.	\$0.74	277	St. Louis.
3 by 4½.....	28.	1.00	277	Do.
3½ by 5.....	14 (no award).			
Bolsters, rocker, oak, wagon, front, wide track:				
2½ by 3½.....	No award.			
2½ by 4½.....	26.	.82	277	Do.
3 by 4½.....	35.	1.10	277	Do.
3½ by 5.....	No award.			
Bolsters, oak, wagon, rear, narrow track:				
2½ by 3½.....	do.			
2½ by 4½.....	21.	.58	277	Do.
3 by 4.....	14.	.74	277	Do.
3½ by 4½.....	8.	1.00	277	Do.
Bolsters, oak, wagon, rear, wide track:				
2½ by 3½.....	No award.			
2½ by 4½.....	31.	.64	277	Do.
3 by 4.....	23.	.72	277	Do.
3½ by 4½.....	29.	1.10	277	Do.
Bows, farm wagon, oak, round top, ½ by 2 inches, per set of 5.	No award.			
Clavises:				
For eveners 1½ inches thick, 4½ inches long, and 5 inches long, wrought iron, with back clips, stay-chain rings, and self-fastening pin, per lb.	do.			
For eveners 2½ inches thick, 4½ inches long, and 5½ inches long, wrought iron, with back clips, stay-chain rings, and self-fastening pins, per lb.	do.			
Clips, singletree, center, ¾-inch clip, ½-inch ring.	do.			
Covers, wagon, 10-ounce canvas, 13 feet 9 inches long, 10 feet wide, full size, with draw rope each end and 3 tie ropes (36 inches long) each side.	48.	9.95	274	Do.
Eveners, hickory, wagon: Full-ironed, narrow track:				
With stay chains.....	No award.			
Without stay chains.....	do.			
Full-ironed, wide track:				
With stay chains.....	do.			
Without stay chains.....	do.			
Not ironed, narrow track.....	do.			
Not ironed, wide track.....	do.			
Fellies (rims), hickory, wagon, bent:				
1½ by 1½ inches.....	3 sets.	2.90	277	Do.
1½ by 1½ inches.....	5 sets.	3.40	277	Do.
1½ by 1½ inches.....	1 set.	4.10	277	Do.
1½ by 1½ inches.....	None.			
1½ by 1½ inches.....	do.			
2 by 2½ inches.....	No award.			
Fellies (rims), oak, wagon, bent:				
1½ by 2 inches.....	do.			
2 by 2½ inches.....	do.			
2½ by 2½ inches.....	do.			
Fellies, oak, wagon, sawed:				
1½ by 2½ inches.....	do.			
1½ by 2½ inches.....	do.			
1½ by 2½ inches.....	do.			
2½ by 3 inches.....	do.			
3 by 2½ inches.....	do.			
4 by 2½ inches.....	do.			
Hook and ferrules, singletree, 1½-inch.	do.			
Hounds, oak, smooth finish, wagon:				
Front, 3 pieces.....	do.			
Pole, 2 pieces.....	do.			
Rear, 2 pieces.....	do.			
Hubs, wagon, oak:				
Not less than 7½ inches diameter, length over all 10 inches, cupped 1½ inches, mortised 1½ by ½ inch.	do.			
Not less than 7½ inches diameter, length over all 10½ inches, cupped 1½ inches, mortised 1½ by ½ inch.	do.			

¹ Only.



## WAGONS, WAGON FIXTURES, ETC.—Continued.

Articles.	Quantity awarded.	Unit price.	No. of con- trac- tor.	Point of delivery.
Hubs, wagon, oak—Continued.				
Not less than 8 inches diameter, length over all 11½ inches, cupped 1½ inches, mortised 1½ by ½ inch.	No award.....	.....	.....	
Not less than 8½ inches diameter, length over all, 12½ inches, cupped 1½ inches, mortised 1½ by ½ inch.	do.....	.....	.....	St. Louis.
Not less than 9½ inches in diameter, length over all 13½ inches, cupped 1½ inches, mortised 2 by ½ inch.	do.....	.....	.....	
Reaches, oak, wagon:				
9 feet 6 inches long by 3½ by 1½.....	do.....	.....	.....	
9 feet 6 inches long by 3½ by 1½.....	do.....	.....	.....	
Skeins, with boxing, long-hooded steel, wagon:				
2½ by 7½ or 8 inches.....	do.....	.....	.....	
2½ by 8 or 8½ inches.....	do.....	.....	.....	
3 by 9 inches.....	do.....	.....	.....	
3½ by 10 inches.....	do.....	.....	.....	
3½ by 11 inches.....	do.....	.....	.....	
Spokes, hickory, buggy, 1½-inch.....	11 sets <sup>1</sup> .....	\$3.90	277	Do.
Spokes, wagon:				
1½-inch.....	1 set <sup>1</sup> .....	2.55	277	Do.
1½-inch.....	None.....	.....	.....	
2-inch.....	9 sets <sup>1</sup> .....	3.25	277	Do.
2½-inch.....	53 sets <sup>1</sup> .....	3.80	277	Do.
2½-inch.....	31 sets <sup>1</sup> .....	4.40	277	Do.
2½-inch.....	None.....	.....	.....	
2½-inch.....	do.....	.....	.....	
3-inch.....	No award.....	.....	.....	
3½-inch.....	do.....	.....	.....	
3½-inch.....	do.....	.....	.....	
3½-inch.....	do.....	.....	.....	
Spring:				
For wagon seats, 3-leaf, 23 by 1½ inches.....	112.....	.90	260	Chicago.
Wagon, elliptic..... PER LB.....	2.....	.09	260	Do.
Tongues, oak, for drop poles:				
2½ by 4 by 4 by ½, 12-foot.....	No award.....	.....	.....	
2½ by 4½ by 4½ by ½, 12-foot.....	do.....	.....	.....	
219 wagons, as follows, at following prices:				
Narrow track, equipped with gear brake, full clipped gear, and hooded steel skeins—				
2½ by 8 inches, tires 1½ by ½ inch.....	.....	87.95	248	South Bend, Ind.
2½ by 8 inches, tires 3 by ½ inch.....	.....	97.03	248	Do.
3 by 9 inches, tires 1½ by ½ inch.....	.....	98.37	248	Do.
3 by 9 inches, tires 3 by ½ inch.....	.....	110.33	248	Do.
3½ by 10 inches, tires 1½ by ½ inch.....	.....	106.57	248	Do.
3½ by 10 inches, tires 3 by ½ inch.....	.....	116.08	248	Do.
3½ by 11 inches, tires 2 by ½ inch.....	.....	122.40	248	Do.
3½ by 11 inches, tires 4 by ½ inch.....	.....	140.45	248	Do.
Wide track, equipped with gear brake, full clipped gear, and hooded steel skeins—				
2½ by 8 inches, tires 1½ by ½ inch.....	.....	87.95	248	Do.
2½ by 8 inches, tires 3 by ½ inch.....	.....	97.03	248	Do.
3 by 9 inches, tires 1½ by ½ inch.....	.....	98.37	248	Do.
3 by 9 inches, tires 3 by ½ inch.....	.....	110.33	248	Do.
3½ by 10 inches, tires 1½ by ½ inch.....	.....	106.57	248	Do.
3½ by 10 inches, tires 3 by ½ inch.....	.....	116.08	248	Do.
3½ by 11 inches, tires 2 by ½ inch.....	.....	122.40	248	Do.
3½ by 11 inches, tires 4 by ½ inch.....	.....	140.45	248	Do.
Narrow track, California stake rack bed; equipped with gear brake, clipped gear, and hooded steel skeins—				
2½ by 8 inches, tires 1½ by ½ inch.....	.....	88.93	248	Do.
2½ by 8 inches, tires 3 by ½ inch.....	.....	97.18	248	Do.
3 by 9 inches, tires 1½ by ½ inch.....	.....	100.21	248	Do.
3 by 9 inches, tires 3 by ½ inch.....	.....	112.27	248	Do.
3½ by 10 inches, tires 1½ by ½ inch.....	.....	111.66	248	Do.
3½ by 10 inches, tires 3 by ½ inch.....	.....	121.14	248	Do.
3½ by 11 inches, tires 2 by ½ inch.....	.....	129.67	248	Do.
3½ by 11 inches, tires 4 by ½ inch.....	.....	147.52	248	Do.

<sup>1</sup> Only.

WAGONS, WAGON FIXTURES, ETC.—Continued.

Articles.	Quantity awarded.	Unit price.	No. of con- tractor.	Point of delivery.
219 wagons, as follows, at following prices— Continued.				
Wide track, California stake rack bed; equipped with gear brake, clipped gear, and hooded steel skeins—				
24 by 8 inches, tires 14 by 4 inch.....		\$88.03	248	South Bend, Ind.
24 by 8 inches, tires 3 by 4 inch.....		97.15	248	Do.
3 by 9 inches, tires 14 by 4 inch.....		100.21	248	Do.
3 by 9 inches, tires 3 by 4 inch.....		112.21	248	Do.
34 by 10 inches, tires 14 by 4 inch.....		111.66	248	Do.
34 by 10 inches, tires 3 by 4 inch.....		121.14	248	Do.
34 by 11 inches, tires 2 by 4 inch.....		129.67	248	Do.
34 by 11 inches, tires 4 by 4 inch.....		147.52	248	Do.
Narrow track, equipped with hooded steel skein, full clipped gear, and box brake—				
24 by 8 inches, tires 14 by 4 inch.....		83.53	248	Do.
24 by 8 inches, tires 3 by 4 inch.....		92.63	248	Do.
3 by 9 inches, tires 14 by 4 inch.....		93.70	248	Do.
3 by 9 inches, tires 3 by 4 inch.....		105.76	248	Do.
34 by 10 inches, tires 14 by 4 inch.....		101.41	248	Do.
34 by 10 inches, tires 3 by 4 inch.....		107.92	248	Do.
34 by 11 inches, tires 14 by 4 inch.....		116.77	248	Do.
34 by 11 inches, tires 4 by 4 inch.....		134.82	248	Do.
Wide track, equipped with hooded steel skein, full clipped gear, and box brake—				
24 by 8 inches, tires 14 by 4 inch.....		83.53	248	Do.
24 by 8 inches, tires 3 by 4 inch.....		92.63	248	Do.
3 by 9 inches, tires 14 by 4 inch.....		93.70	248	Do.
3 by 9 inches, tires 3 by 4 inch.....		105.76	248	Do.
34 by 10 inches, tires 14 by 4 inch.....		101.41	248	Do.
34 by 10 inches, tires 3 by 4 inch.....		107.92	248	Do.
34 by 11 inches, tires 14 by 4 inch.....		116.77	248	Do.
34 by 11 inches, tires 4 by 4 inch.....		134.82	248	Do.
Bows, oak.....	None.....			Do.
Spring seats.....	174.....	2.92	248	Do.
Top boxes.....	174.....	(1)	248	Do.
Whiffletrees, hickory, wagon:				
Full ironed, with wrought strap irons and hooks at ends and iron ring at center clip.....	409.....	1.11	248	Do.
Not ironed.....	235.....	.48	248	Do.
Yokes, neck, hickory, wagon:				
Full ironed.....	159.....	1.06	248	Do.
Not ironed, turned to shape and size.....	9.....	.35	248	Do.

17 inches by 10 feet, \$4.66; 9 inches by 10 feet 6 inches, \$5.34; 11 inches by 10 feet 6 inches, \$6.37.

## PAINTS, OILS, AND GLASS.

Article.	Bids opened in St. Louis May 15, 1913.				Bids opened in San Francisco June 15, 1913.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Box, powdered.</b>	None.				795 pounds.	\$0.11	9	San Francisco.
<b>Brushes:</b>								
Calcuttine, 7-inch.	116.	\$0.45	161	St. Louis.	None.			
Marking, assorted, 1 to 6.	18 dozen.	.52	161	do.	do.			
Paint, wall, flat, long stock—								
3 inches wide.	331.	.413	65	Chicago.	83.	.60	286	Do.
4 inches wide.	591.	.60	224	St. Louis.	36.	.95	286	Do.
<b>Brushes:</b>								
Paint, round or oval, chisel-pointed (sash tools), No 6.	None.				345.	.16	9	Do.
Slatting, 6 inches wide.	5.	.88	203	Omaha.	None.			
Varnish, 3 inches wide.	233.	.27	161	St. Louis.	46.	.55	286	Do.
Whitewash, 8 inches wide, with handle.	86.	.70	203	Omaha.	31.	.60	9	Do.
Coal tar, in 5-gallon cans.	55 gallons.	.311	15	St. Louis.	120 gallons.	.46	31	Do.
<b>Glass, window, single thick:</b>								
8 by 10.	15 boxes.	4.33	224	do.				
9 by 12.	2 boxes.	4.33	224	do.				
9 by 14.	224.	4.33	224	do.				
9 by 15.	2 boxes.	4.33	224	do.				
9 by 16.	1 box.	4.33	224	do.				
9 by 18.	2 boxes.	4.56	224	do.				
10 by 12.	25 boxes.	4.33	224	do.				
10 by 14.	21 boxes.	4.33	224	do.				
10 by 16.	31 boxes.	4.56	224	do.				
10 by 18.	11 boxes.	4.56	224	do.				
10 by 20.	9 boxes.	4.56	224	do.				
10 by 22.	8 boxes.	4.56	224	do.				
10 by 24.	7 boxes.	4.56	224	do.				
10 by 26.	9 boxes.	4.71	224	do.				
12 by 14.	23 boxes.	4.56	224	do.				
12 by 16.	40 boxes.	4.56	224	do.				
12 by 18.	44 boxes.	4.56	224	do.				
12 by 20.	24 boxes.	4.56	224	do.				
12 by 22.	14 boxes.	4.56	224	do.				
12 by 24.	32 boxes.	4.71	224	do.				
12 by 26.	15 boxes.	4.71	224	do.				
12 by 28.	36 boxes.	4.71	224	do.				
12 by 30.	17 boxes.	5.53	224	do.				
12 by 32.	27 boxes.	5.53	224	do.				
12 by 34.	9 boxes.	5.53	224	do.				
12 by 36.	24 boxes.	5.53	224	do.				

12 by 88.	4 boxes.	5.52	224	do.	224
14 by 14.	8 boxes.	4.56	224	do.	224
14 by 16.	25 boxes.	4.56	224	do.	224
14 by 18.	36 boxes.	4.56	224	do.	224
14 by 20.	16 boxes.	4.56	224	do.	224
14 by 22.	16 boxes.	4.71	224	do.	224
14 by 24.	14 boxes.	4.71	224	do.	224
14 by 26.	27 boxes.	5.52	224	do.	224
14 by 28.	21 boxes.	5.52	224	do.	224
14 by 30.	32 boxes.	5.52	224	do.	224
14 by 32.	19 boxes.	5.52	224	do.	224
14 by 34.	35 boxes.	5.52	224	do.	224
14 by 36.	13 boxes.	5.52	224	do.	224
14 by 38.	5 boxes.	5.52	224	do.	224
14 by 42.	2 boxes.	5.52	224	do.	224
14 by 48.	5 boxes.	5.52	224	do.	224
16 by 18.	8 boxes.	5.52	224	do.	224
16 by 20.	9 boxes.	5.52	224	do.	224
16 by 22.	16 boxes.	5.52	224	do.	224
16 by 24.	53 boxes.	5.52	224	do.	224
16 by 26.	13 boxes.	5.52	224	do.	224
16 by 28.	38 boxes.	5.52	224	do.	224
16 by 30.	32 boxes.	5.52	224	do.	224
16 by 32.	11 boxes.	5.52	224	do.	224
16 by 34.	18 boxes.	5.52	224	do.	224
16 by 36.	2 boxes.	5.52	224	do.	224
16 by 38.	16 boxes.	5.52	224	do.	224
16 by 40.	1 box.	5.52	224	do.	224
16 by 42.	39 boxes.	7.28	224	do.	224
16 by 44.	20 boxes.	7.28	224	do.	224
16 by 46.	2 boxes.	6.23	224	do.	224
16 by 48.	1 box.	6.23	224	do.	224
18 by 20.	12 boxes.	7.14	224	do.	224
18 by 22.	9 boxes.	7.14	224	do.	224
18 by 24.	21 boxes.	7.28	224	do.	224
18 by 26.	6 boxes.	7.28	224	do.	224
18 by 28.	17 boxes.	7.14	224	do.	224
18 by 30.	8 boxes.	7.14	224	do.	224
18 by 32.	20 boxes.	7.14	224	do.	224
18 by 34.	4 boxes.	7.14	224	do.	224
18 by 36.	17 boxes.	7.28	224	do.	224
18 by 38.	7 boxes.	7.28	224	do.	224
18 by 40.	28 boxes.	7.28	224	do.	224
18 by 42.	4 boxes.	7.28	224	do.	224
18 by 44.	10 boxes.	7.28	224	do.	224
18 by 46.	do.	7.28	224	do.	224
18 by 48.	do.	7.28	224	do.	224
20 by 26.	do.	7.28	224	do.	224
20 by 28.	do.	7.28	224	do.	224
20 by 30.	do.	7.28	224	do.	224
20 by 32.	do.	7.28	224	do.	224
20 by 34.	do.	7.28	224	do.	224
20 by 36.	do.	7.28	224	do.	224
20 by 38.	do.	7.28	224	do.	224
20 by 40.	do.	7.28	224	do.	224
20 by 42.	do.	7.28	224	do.	224
20 by 44.	do.	7.28	224	do.	224
20 by 46.	do.	7.28	224	do.	224
20 by 48.	do.	7.28	224	do.	224
20 by 50.	do.	7.28	224	do.	224
20 by 52.	do.	7.28	224	do.	224
20 by 54.	do.	7.28	224	do.	224
20 by 56.	do.	7.28	224	do.	224
20 by 58.	do.	7.28	224	do.	224
20 by 60.	do.	7.28	224	do.	224
20 by 62.	do.	7.28	224	do.	224
20 by 64.	do.	7.28	224	do.	224
20 by 66.	do.	7.28	224	do.	224
20 by 68.	do.	7.28	224	do.	224
20 by 70.	do.	7.28	224	do.	224
20 by 72.	do.	7.28	224	do.	224
20 by 74.	do.	7.28	224	do.	224
20 by 76.	do.	7.28	224	do.	224
20 by 78.	do.	7.28	224	do.	224
20 by 80.	do.	7.28	224	do.	224
20 by 82.	do.	7.28	224	do.	224
20 by 84.	do.	7.28	224	do.	224
20 by 86.	do.	7.28	224	do.	224
20 by 88.	do.	7.28	224	do.	224
20 by 90.	do.	7.28	224	do.	224
20 by 92.	do.	7.28	224	do.	224
20 by 94.	do.	7.28	224	do.	224
20 by 96.	do.	7.28	224	do.	224
20 by 98.	do.	7.28	224	do.	224
20 by 100.	do.	7.28	224	do.	224

<sup>1</sup>Buy under 25 per cent clause of eastern contract.

Glass, window, double thick:

## PAINTS, OILS, AND GLASS—Continued.

Article.	Bids opened in St. Louis May 15, 1913.				Bids opened in San Francisco June 15, 1913.			
	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.
Glass window, double thick—Continued.								
28 by 30.....	6 boxes.....	\$7.35.....	234	St. Louis.....				
28 by 32.....	6 boxes.....	7.84.....	234	do.....				
28 by 34.....	14 boxes.....	7.84.....	234	do.....				
30 by 40.....	38 boxes.....	7.84.....	234	do.....				
Glass cutters, rotary or steel wheel type.....	202.....	.227.....	122	do.....	None.....			
Glasser's points.....	375 papers.....	.17.....	234	do.....	77 papers.....	\$0.15.....	9	San Francisco.
Glue:								
Cabinetmaker's.....	315 pounds.....	.33.....	122	do.....	161 pounds.....	.275.....	286	Do.
Liquid, prepared, in cans, cased.....	None.....				464 quarts.....	.70.....	9	Do.
Interior varnish:								
In 1-gallon cans.....	385 gallons.....	{ 1.10.....	228	St. Louis, Chicago, or Cleveland.....	161 gallons.....	{ 1.15.....	276	New York, Chicago, St. Louis, Omaha, Kansas City, St. Paul, San Francisco, Los Angeles, Portland, or Seattle.
In 5-gallon cans.....	283 gallons.....	.60.....	228	do.....		1.10.....	276	Chicago.
Japan, house painter's.....	133 pounds.....	.15.....	65	Los Angeles.....	123 gallons.....	.85.....	6	
Lampblack:	446 pounds.....	.22.....	228	Chicago.....	126 pounds.....	.25.....	9	San Francisco.
In 1-pound papers.....				St. Louis, Chicago, or Cleveland.....	146 pounds.....	.15.....	45	Chicago.
In oil.....								
Lead, red:								
Dry in kegs.....	100 pounds.....	.1098.....	88	San Francisco.....	200 pounds.....	.1144.....	88	San Francisco.
In oil.....	1,480 pounds.....	( ).....	179	St. Louis.....	20 pounds.....	.121.....	179	Do.
Lead, white.....	7,525 pounds.....	.1026.....	33	Chicago.....	24,484 pounds.....	.1119.....	58	Do.
Oakum, plumber's, not spun.....	367 pounds.....	.11.....	122	St. Louis.....	34 pounds.....	.14.....	9	Do.
Oil:								
Floor, in 5-gallon cans.....	5,671 gallons.....	.19.....	239	San Francisco.....	472 gallons.....	.21.....	239	Do.
Linseed, boiled.....	15,167 gallons.....	1.09.....	233	Omaha.....	None.....			
Linseed, raw.....	3,783 gallons.....	1.71.....	23	San Francisco.....	do.....			
Linseed, raw.....	1,560 gallons.....	1.66.....	233	Omaha.....	do.....			
Linseed, raw.....	1,155 gallons.....	1.70.....	23	San Francisco.....	do.....			
Lubricating oil:								
Steam cylinder—								
In barrels.....	1,221 gallons.....	.34.....	165	St. Louis.....	507 gallons.....	.32.....	239	Do.
In 5-gallon cans.....	2,060 gallons.....	.41.....	165	do.....	633 gallons.....	.37.....	239	Do.
Gas								
Light—								
In barrels.....	1,276 gallons.....	.25.....	52	do.....	275 gallons.....	.27.....	239	Do.
In 5-gallon cans.....	780 gallons.....	.35.....	52	do.....	240 gallons.....	.33.....	239	Do.

[illegible]

<sup>1</sup> Buy under eastern contract.

**Buy a  
s Only.**

\* In 100-pound containers, \$0.1173; in 50-pound c

<sup>a</sup> In 100-pound containers, \$0.1173; in 50-pound containers, \$0.1194; in 25-pound containers, \$0.1194; in 12½-pound containers, \$0.121A.

## PAINTS, OILS, AND GLASS—Continued.

Article.	Bids opened in St. Louis May 15, 1918.				Bids opened in San Francisco June 15, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Paper, building, rosin-sized:								
Light weight.....	None.				600 pounds.....	\$0.03	103	Oakland, Cal.
Medium weight.....	do.				9,800 pounds.....	.03	103	Do.
Heavy weight.....	do.				1,350 pounds.....	.03	103	Do.
Paper, tarred, crated.....	160 rolls.....	\$1.40	186	San Francisco.	6 rolls.....	1.65	103	Do.
Pitch.....	None.				No award.			
Putty:								
In 5-pound cans, cased.....	3,128 pounds.....	.05	65	Chicago.	1,075 pounds.....	.035	286	San Francisco.
In 10-pound cans, cased.....	1,740 pounds.....	.0475	65	do.	500 pounds.....	.054	286	Do.
In 25-pound cans, cased.....	2,250 pounds.....	.0475	65	do.	425 pounds.....	.0475	286	Do.
Rosin, common.....	None.				254 pounds.....	.08	286	Do.
Slatting, wall, black-board, liquid.....	34 gallons.....	1.55	65	do.	6 gallons.....	1.44	286	Do.
Stain, oak, oil, light or medium in color, in 1-gallon cans, cased.....	148 gallons.....	.78	65	do.	25 gallons.....	1.10	286	Do.
Turpentine:								
In 1-gallon cans, cased.....	787 gallons.....	.70	138	do.	383 gallons.....	.85	23	Do.
In 5-gallon cans, cased.....	1,675 gallons.....	.66	233	Burlington, Iowa.	1,140 gallons.....	.70	23	Do.
Umber, burnt, in oil.....	428 pounds.....	.16	238	St. Louis, Chicago, or Cleveland.	516 pounds.....	.14	45	Chicago.
Varnish, wagon.....	122 gallons.....	1.25	16	St. Louis.	41 gallons.....	1.50	45	Do.
Whiting, extra, glider's:								
If in barrels.....	866 pounds.....	.0125	224	do.	1,035 pounds.....	.01875	286	San Francisco.
If in wooden drums.....		.02	234	do.		.024	286	Do.
If in less quantities.....		.03	239	do.		.0275	286	Do.

\* Only.

## TIN AND STAMPED WARE, STOVES, HOLLOW WARE, ETC.

Article.	Bids opened in St. Louis May 11, 1913				Bids opened in San Francisco June 22, 1913.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Boilers, wash, XX tin, flat copper bottom, size about 21 by 11 inches, iron drop handles, riveted, heavy.	343 <sup>1</sup> .....	\$1.65	121	Chicago.....	None.....			
Buckets, water, galvanized iron, heavy, full size, 14-quart, 1-inch bail.	1,298 <sup>1</sup> .....	.576	122	St. Louis.....	477.....	\$0.66	9	San Francisco.
Candlesticks, plainished tin or japanned, 6-inch.	4 dozen.....	.66	225	do.....	7 dozen.....	.75	9	Do.
Cans:								
Kerosene, galvanized, corrugated sides, 1-gallon, common top.	30 $\frac{1}{4}$ dozen <sup>1</sup> .....	3.00	121	Chicago.....	6 $\frac{1}{4}$ dozen.....	4.50	9	Do.
Milk, all-steel, 32-quart, ironclad, retinned.	34 <sup>1</sup> .....	4.20	121	do.....	2.....	4.50	9	Do.
Coffee-pots, IX tin:								
2-quart.....	18 <sup>1</sup> .....	.13	121	do.....	None.....			
4-quart.....	No award				11 <sup>1</sup> .....	.90	124	Do.
Coffee boilers, XX tin, copper bottom:								
6-quart.....	11 <sup>1</sup> .....	.79	121	Chicago.....	None.....			
11-quart.....	16 <sup>1</sup> .....	2.10	121	do.....	6 <sup>1</sup> .....	3.25	124	Do.
Coffee-pots, 4-quart, gray-enameled ware.....	20 <sup>1</sup> .....	.40	121	do.....	5 <sup>1</sup> .....	.72	124	Do.
Coffee boilers, 6-quart, gray-enameled ware.....	31 <sup>1</sup> .....	.67	121	do.....	2 <sup>1</sup> .....	.80	124	Do.
Coffee mills:								
Iron or block-tin hopper box.....	6 <sup>1</sup> .....	.46	121	do.....	10.....	.75	9	Do.
With wheel, capacity of hopper 6 pounds.	None.....				None.....			
Cups, full size, XX stamped tin, retinned, riveted handle:	16.....	1.42	225	St. Louis.....	do.....			
1-pint.....	56 dozen.....	.085	225	do.....	do.....			
Quart.....	None.....				do.....			
Dippers, water, 1-quart, XX tin, long handle.	14 $\frac{1}{4}$ dozen <sup>1</sup> .....	2.00	121	Chicago.....	do.....			
Flour sifters.....	155 <sup>1</sup> .....	.172	122	St. Louis.....	89.....	.14	9	Do.
Funnels, stamped tin, fluted, retinned:								
1-pint.....	5 $\frac{1}{4}$ dozen <sup>1</sup> .....	.53	121	Chicago.....	1 $\frac{1}{4}$ dozen.....	.72	9	Do.
1-quart.....	10 $\frac{1}{4}$ dozen <sup>1</sup> .....	.75	121	do.....	2 $\frac{1}{4}$ dozen.....	1.05	9	Do.
2-quart.....	8 $\frac{1}{4}$ dozen <sup>1</sup> .....	1.10	121	do.....	2 $\frac{1}{4}$ dozen.....	1.50	9	Do.
Kettles, with covers, wrought-steel hollow ware, retinned:								
7-quart.....	None.....				30 <sup>1</sup> .....	2.89	124	Do.
13-quart.....	do.....				21 <sup>1</sup> .....	3.77	124	Do.
16-quart, porcelain-lined.....	88 <sup>1</sup> .....	1.40	121	do.....	None.....			

<sup>1</sup>Any increase under 25 per cent clause to be at contractor's option.<sup>1</sup> Only.



## TIN AND STAMPED WARE, STOVES, HOLLOW WARE, ETC.—Continued.

Article.	Bids opened in St. Louis May 11, 1918.				Bids opened in San Francisco June 22, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Measures, XX tin, with full rim:								
Pint.....	None.....	80.08	121	Chicago.....	None.....			
Quart.....	128 1/2.....				.....do.....			
Pails, water, XXX charcoal tin, wired at top, riveted ears; rivets soldered inside:								
10-quart.....	560 1/2.....	.40	121	.....do.....	.....do.....			
14-quart.....	231 1/2.....	.48	121	.....do.....	.....do.....			
Pans, milk.....	None.....				.....do.....			
Pans, bake, sheet steel, No. 27:								
12 by 19 by 4 inches.....	92 1/2.....	.60	121	Chicago.....	14 1/2.....	\$0.80	124	San Francisco.
15 by 20 by 4 inches, with two 1/2-inch oval runners.....	116 1/2.....	.90	121	.....do.....	86 1/2.....	1.10	124	Do.
Pans, dish, XXX stamped tin, retinned:								
14-quart.....	239 1/2.....	1.20	121	.....do.....	73 1/2.....	1.10	124	Do.
Pans, dust, japanned, heavy.....	201 1/2.....	1.30	121	.....do.....	118 1/2.....	1.25	124	Do.
Pans, fry, No. 4, wrought steel, polished, 8 inches across bottom.....	41 dozen 1/2.....	1.15	122	St. Louis.....	20 1/4 dozen.....	1.49	122	St. Louis.
Pans, fry, extra-heavy wrought steel:	47.....	.165	225	.....do.....	34.....	.25	9	San Francisco.
16 inches across bottom.....	25.....							
17 inches across bottom.....	None.....	2.80	225	.....do.....	2 1/2.....	3.25	124	Do.
18 inches across bottom.....	.....do.....				7 1/2.....	4.00	124	Do.
Pans, fry, solid cast iron, 18 by 30 by 2 1/2 inches.	.....do.....				None.....			
Pans, milk, LXX tin, seamless, wide flange, retinned, extra quality:								
1-quart.....	.....do.....				.....do.....			
2-quart.....	.....do.....				.....do.....			
4-quart.....	49 1/4 dozen.....	1.50	225	St. Louis.....	.....do.....			
6-quart.....	17 1/4 dozen.....	1.92	225	.....do.....	.....do.....			
8-quart.....	None.....				.....do.....			
Plates, LXX stamped tin, about 9-inch:								
Baking, deep, jelly.....	12 dozen 1/2.....	.60	121	Chicago.....	5 dozen 1/2.....	.85	124	Do.
Pie, deep.....	59 dozen 1/2.....	.50	121	.....do.....	11 dozen 1/2.....	.80	124	Do.
Pots, soup stock, seamless, retinned inside and outside, with faucet and strainer:								
6-gallon.....	None.....				None.....			
9-gallon.....	.....do.....				.....do.....			

[illegible]

**STOVES, PIPE, PIPE, HOLLOW WARE, ETC.**

Caldrons iron, portable, full jacket, with furnace:					
48 gallons capacity.....	3 <sup>4</sup> .....	\$27.37	32	Syracuse, N. Y.	
75 gallons capacity.....	2.....	\$0.00	26	St. Louis.....	
Furnaces full jacket:					
For 48-gallon portable caldron.....	2.....	\$3.50	25	do.....	
For 75-gallon portable caldron.....	None.....				
Collars, stovepipe:					
Size 6-inch.....	80 1.....	\$0.04	121	Chicago.....	
Size 7-inch.....	130 1.....	.05	121	do.....	

1 Only.  
 \* Any increase under 25 per cent clause to be at contractor's option.  
 † 14-inch accepted.  
 ‡ 45-gallon capacity accepted.

Only.

**Any increase under 25 per cent clause to be at contractor's option.**

14-inch accepted.

**45-gallon capacity accented.**

## STOVES, PIPE, HOLLOW WARE, ETC.—Continued—

Article.	Bids opened in St. Louis May 11, 1918.				Bids opened in San Francisco June 22, 1918.			
	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.
Dampers, stovepipe: Size 6-inch.....	574.....	.075	247	Chicago, Ill., or Freeport, Ill.				
Size 7-inch.....	76.....	.10	247	do.....				
Elbows, stovepipe; adjustable, not corrugated, No. 26 gauge: Size 6-inch.....	462 <sup>1</sup> .....	.175	150	Chicago.....				
Size 7-inch.....	79 <sup>1</sup> .....	.20833	150	do.....				
Elbows, stovepipe; corrugated, one piece, not adjustable, No. 26 gauge: Size 6-inch.....	None.....							
Size 7-inch.....	91 <sup>1</sup> .....	12.00	278	St. Louis.....				
Hods, coal, galvanized, extra heavy: 16-inch.....	321.....	.585	245	Detroit.....				
18-inch.....	451.....	.6975	245	do.....				
Ovens, Dutch, cast-iron, deep pattern: 10 inches diameter inside.....	None.....							
15 inches diameter inside.....	do.....							
Pipe, stove, No. 28 gauge: Size 6-inch.....	3,936 joints.....	.152	150	Chicago.....				
Size 7-inch.....	494 joints.....	.171	150	do.....				
Polish, stove.....	100 dozen <sup>1</sup> .....	.45	121	do.....				
<sup>1</sup> Only. : 45-gallon capacity accepted. : Per dozen.								
Stoves, box, heating, wood: 24 inches long.....	2.....	\$7.15	39	F.o.b. St. Louis or Chicago				
27 inches long.....	2.....	\$7.05	39	F.o.b. Quincy, Ill.				
32 inches long.....	None.....	7.25	28	F.o.b. St. Louis.....				
37 inches long.....	do.....							
Stoves, steel box, heating, wood, not lighter than No. 22-gauge steel, with cast lining (specify height and weight of lining): 22 inches long.....	61.....	\$6.70	43	St. Louis.....				
25 inches long.....	21.....	\$7.50	43	do.....				
28 inches long.....	21.....	\$8.80	43	do.....				
32 inches long.....	21.....	\$12.00	39	F.o.b. Quincy, Ill.				
		\$12.20	39	F.o.b. Chicago or St. Louis				

37 inches long.....	13.....	\$15.05 \$15.25	F. o. b. Quincy, Ill. F. o. b. Chicago or St. Louis.		
Stoves, sheet steel, heating, coal, cast lining (specify height and weight of lining), with hot-blast tube:					
15-inch body.....	22.....	\$12.35	San Francisco.		
	39.....	\$12.37	Elyria, Ohio.		
	64.....	\$14.11	do.		
17-inch body.....	17 <sup>1</sup> .....	1.86	Chicago.		
Stoves, heating, 18-inch, air-tight, sheet steel lined (specify height and weight of lining), erated.					
Stoves, heating, coal:					
14-inch cylinder, to weigh not less than 138 pounds.....	10.....	\$10.52 \$10.50	Quincy, Ill. do.		
16-inch cylinder, to weigh not less than 178 pounds.....	28 <sup>1</sup> .....	\$12.02 \$11.45	St. Louis. do.		
22-inch cylinders, to weigh not less than 275 pounds.....	9.....	\$13.70 \$33.50	do. Chicago.		
Combined coal and wood, large size, 22-inch cylinder.	15.....	\$20.86	do.		
Stoves, heating, wood, sheet-iron, with outside rods:					
32-inch.....	3.....	\$19.20 \$19.40	F. o. b. Quincy, Ill. F. o. b. Chicago or St. Louis.		
37-inch.....	None	\$29.40	Elyria, Ohio.		
Stoves, heating, hard coal, mounted, base burner, fire pot about 12 by 14 inches.	13.....				
Stoves, coal, laundry:					
For heating 24 irons.....	5.....	18.89	Cincinnati.		
For heating 36 irons.....	3.....	22.57	do.		
Stoves, cooking, coal:					
7-inch, oven not less than 16 by 16 by 10 inches, to weigh about 200 pounds.....	1.....	\$14.50	St. Louis.		
8-inch, oven not less than 18 by 18 inches, to weigh about 240 pounds.....	18.....	\$16.50	do.		
9-inch, oven not less than 19 by 19 by 12 inches, to weigh about 280 pounds.....	24 <sup>1</sup> .....	\$20.50	do.		
Stoves, cooking, wood:					
6-inch, length of wood 18 inches, oven not less than 14 by 16 by 11 inches, to weigh not less than 180 pounds.....	1.....	\$16.40 \$16.60	F. o. b. Quincy, Ill. F. o. b. Chicago or St. Louis.		
7-inch, length of wood 20 inches, oven not less than 14 by 18 by 12 inches, to weigh not less than 225 pounds.....	None				

\* Unrated.

\* Grated.

\* Per dozen.

\* Only.

## STOVES, PIPE, HOLLOW WARE, ETC.—Continued.

Article.	Bids opened in St. Louis May 11, 1918.				Bids opened in San Francisco June 22, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Stoves, cooking, wood—Continued.								
8-inch, length of wood 22 inches, oven not less than 19 by 20 by 13 inches, to weigh about 270 pounds.	4.....	{ \$21.65 121.95	39	F. o. b. Quincy, Ill.				
9-inch, length of wood 22 inches, oven not less than 21 by 22 by 14 inches, to weigh about 310 pounds.	10.....	21.80	28	F. o. b. Chicago or St. Louis.				
Ranges, family size, six 8-inch lids, oven not less than 20 by 124 inches, for wood or soft coal, large-sized fire box, water front or back.	35.....	{ 131.00 131.35	39	F. o. b. Quincy, Ill.				
Ranges, six 8-inch lids, oven not less than 14 by 16 by 10 inches, for wood or soft coal, water front or back.	8.....	{ 26.00 27.30	104	San Francisco.				
Stoves, cooking, kerosene oil, wick, 3 burners, blue flame.	46 <sup>1</sup> .....	11.15	150	F. o. b. Quincy, Ill.				
Stoves, portable, heating, tubular, kerosene oil, wick.	33.....	13.76	49	F. o. b. Chicago or St. Louis.				

## HARDWARE.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Adze, c. s., house carpenter's, square head, 44-inch cut, first quality, to bear manufacturer's brand wrought iron, steel face:	3.....	\$1.35	245	Newark, N. J.	1.....	\$1.80	9	San Francisco.
100-pound.....per lb.		.16	121	Chicago.	1.....	.22	9	Do.
140-pound.....per lb.	3 <sup>1</sup> .....	.16	121	do.	2.....	.22	9	Do.
200-pound.....per lb.		.16	121	do.	None.			
Auger, put, with extension lip:								
1-inch.....	5 <sup>1</sup> .....	.63	121	do.	1.....	.75	9	Do.
1 1/2-inch.....	7 <sup>1</sup> .....	.85	121	do.	5.....	.95	9	Do.
2-inch.....	5 <sup>1</sup> .....	1.10	121	do.	2.....	1.20	9	Do.
4-inch.....	1.....	1.50	121	do.	None.			
Auger, c. s., hollow, adjustable, Bonney pattern, to cut 3/4 to 1 inch.	1 <sup>1</sup> .....	.65	121	do.	None.			

Aces:	53 1/2 dozen <sup>1</sup> .....	* 13.75	121	.....do.....	43 1/2 dozen.....	19.20	9	Do.
Chopping, single-bit, Yankee pattern, first quality handled with No. 1 handles, assorted, 3 1/2 to 4 1/2 pounds, to bear manufacturer's brand.	None.....				None.....			
Broad, c. s., 12-inch cut, single level, steel head.	39 <sup>1</sup> .....	.87	121	Chicago.	6.....	.80	9	Do.
Hunter's, inserted or overlaid steel, handled, No. 2.	None.....				1,460 pounds.....	.13	9	Do.
Belt:					None.....			
Do v. No. 2 wrought.	18 1/2.....	.40	121	Chicago.	1.....	1.75	9	Do.
Hand, No. 8, polished, extra heavy.	11 1/2.....	1.40	121	.....do.....	4.....	36.00	9	Do.
Bells, steel, with fixtures for hanging.					None.....	67.00	9	Do.
Handled.								
To weigh 300 to 260 pounds.	2.....	50.00	109	Hillsboro, Ohio.	12 feet.....		106	San Francisco, Portland, or Seattle.
To weigh 340 to 350 pounds.	None.....	65.00	109	.....do.....	200 feet.....		106	Do.
To weigh 400 to 425 pounds.					N none.....			
Belted leather first grade only (bids on solid woven cotton belting will also be considered):								
1-inch, single.	140 feet <sup>2</sup> .....	.109	114	St. Louis.....	12 feet.....	.1026	106	San Francisco.
1 1/2-inch, single.	100 feet.....	.163	33	.....do.....	200 feet.....	.1539	106	Do.
1 1/2-inch, double.	428 feet.....	.189	33	.....do.....	N none.....			
2-inch, single.	670 feet.....	.216	33	.....do.....	305 feet <sup>2</sup> .....	.2052	106	Do.
2-inch, double.	271 feet.....	.48	33	.....do.....	100 feet <sup>2</sup> .....	.4104	100	San Francisco.
3-inch, single.	601 feet.....	.465	163	.....do.....	165 feet <sup>2</sup> .....	.4925	100	Do.
3-inch, double.	N none.....	.54	163	.....do.....	20 feet <sup>2</sup> .....	.5746	100	Do.
4-inch, single.	572 feet <sup>2</sup> .....	.69	114	.....do.....	50 feet <sup>2</sup> .....	.6567	100	Do.
4-inch, double.	N none.....	.739	163	.....do.....	N none.....			
5-inch, single.	117 feet.....	.821	163	.....do.....	200 feet <sup>2</sup> .....	.884	100	Do.
5-inch, double.	419 feet.....	.985	163	.....do.....	230 feet <sup>2</sup> .....	1.0368	100	Do.
6-inch, single.	N none.....	2.304	33	.....do.....	N none.....			
6-inch, double.								
12-inch, double.								
Belted rubber first grade only:								
2-ply, 2-inch.	55 feet <sup>2</sup> .....	.135	163	.....do.....	106 feet.....	.165	101	Akron, Ohio.
3-ply, 2-inch.	275 feet <sup>2</sup> .....	.18	163	.....do.....	58 feet.....	.22	101	Do.
3-ply, 4-inch.	520 feet <sup>2</sup> .....	.37	163	.....do.....	276 feet.....	.33	101	Do.
4-ply, 4-inch.	257 feet <sup>2</sup> .....	.432	163	.....do.....	250 feet.....	.53	101	Do.
4-ply, 6-inch.	25 feet <sup>2</sup> .....	.54	163	.....do.....	160 feet.....	.66	101	Do.
4-ply, 10-inch.	N none.....				60 feet.....	.7876	101	Do.
4-ply, 12-inch.	15 1/2.....	.65	121	Chicago.....	19.....	.35	9	San Francisco.
Bereus, sliding T, 10-inch, metal handle.								
Bits, auger, c. s., extension lip:								
1-inch.	7 1/2 dozen <sup>2</sup> .....	2.16	121	.....do.....	2 1/2 dozen.....	2.25	9	Do.
1 1/2-inch.	7 1/2 dozen <sup>2</sup> .....	2.16	121	.....do.....	1 1/2 dozen.....	2.25	9	Do.
2-inch.	7 1/2 dozen <sup>2</sup> .....	2.16	121	.....do.....	1 1/2 dozen.....	2.25	9	Do.
3-inch.	7 1/2 dozen <sup>2</sup> .....	2.38	169	Millers Falls, Mass.	1 dozen.....	2.25	9	Do.
4-inch.	7 1/2 dozen <sup>2</sup> .....	2.38	169	.....do.....	3 dozen.....	2.25	9	Do.
5-inch.	7 1/2 dozen <sup>2</sup> .....	2.85	169	.....do.....	1 1/2 dozen.....	2.70	9	Do.
6-inch.	7 1/2 dozen <sup>2</sup> .....	2.85	169	.....do.....	1 1/2 dozen.....	2.70	9	Do.
7-inch.	7 1/2 dozen <sup>2</sup> .....	3.33	169	.....do.....	1 1/2 dozen.....	3.15	9	Do.
8-inch.	7 1/2 dozen <sup>2</sup> .....	3.33	169	.....do.....	1 1/2 dozen.....	3.15	9	Do.

<sup>1</sup> Without handles.

<sup>2</sup> Only.

Crated.

## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Bits, auger, c. s., extension 1½—Continued.								
1½-inch.	4½ dozen.	\$3.93	169	Miller Falls, Mass.	4½ dozen.	\$3.71	9	San Francisco.
1-inch.	5½ dozen.	2.93	169	do.	5½ dozen.	3.71	9	Do.
1-inch.	6½ dozen.	4.32	169	do.	6½ dozen.	4.37	9	Do.
Blades, saw, butcher's, 20-inch.	8½ dozen.	1.86	123	St. Louis.	2½ dozen.	2.96	123	St. Louis.
Blades, hack saw, 14, 18, and 32 teeth, as may required.								
8-inch.	4½ dozen.	6.00	121	Chicago.	2½ gross.	5.07	169	United States of America.
10-inch.	10½ dozen.	7.50	121	do.	4½ gross.	6.34	169	Do.
12-inch.	10½ dozen.	9.00	121	do.	4½ gross.	7.60	169	Do.
Blowers, blacksmith's, crank motion, 12-inch fan, complete	3.	15.00	143	St. Louis.	3.	17.50	9	San Francisco.
Bolt, carriage, per 100:								
by 1.	3,850.	.48	220	St. Louis.		.66	9	Do.
by 1½.	3,850.	.48	220	do.		.66	9	Do.
by 2.	3,200.	.52	220	do.		.73	9	Do.
by 2½.	3,500.	.57	220	do.		.79	9	Do.
by 3.	3,500.	.62	220	do.		.86	9	Do.
by 3½.	2,150.	.67	220	do.		.83	9	Do.
by 4.	2,700.	.71	220	do.		.99	9	Do.
by 4½.	2,900.	.80	220	do.		1.26	9	Do.
by 5.	3,850.	.96	220	do.		1.37	9	Do.
by 5½.	3,300.	1.16	220	do.		1.47	9	Do.
by 6.	4,150.	1.23	220	do.		1.58	9	Do.
by 6½.	3,650.	1.33	220	do.		1.79	9	Do.
by 7.	2,900.	1.43	220	do.		2.07	9	Do.
by 7½.	2,900.	1.53	220	do.		2.21	9	Do.
by 8.	1,650.	2.75	220	do.		3.30	9	Do.
by 8½.	1,075.	3.46	220	do.		3.75	9	Do.
by 9.	1,075.	3.46	220	do.		4.20	9	Do.
by 9½.	1,075.	3.46	220	do.		4.66	9	Do.
by 10.	850.	4.13	220	do.		5.10	9	Do.
by 11.	850.	4.47	220	do.		6.01	9	Do.
by 12.	850.	4.81	220	do.		6.46	9	Do.
by 12.	850.	5.14	220	do.		6.92	9	Do.
Bolt, door, wrought-steel or wrought-iron band.								
1-inch.	18 dozen.	1.00	121	Chicago.	9 dozen.	1.00	9	Do.
8-inch.	6 dozen.	2.96	83	New York.	2½ dozen.	4.15	9	Do.

[illegible]

<sup>3</sup> 14 and 24 teeth, only, as may be required.

\*25 per cent increase optional with contractor.  
 †Only.



## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Bolts, tire, per 100:								
1 1/2 by 1 1/2	1,800	\$0.28	245	New York.	1,000	\$0.36	9	San Francisco.
1 1/2 by 1 1/2	2,350	.80	245	do.	1,700	.30	9	Do.
1 1/2 by 1 1/2	2,000	.33	245	do.	2,700	.42	9	Do.
1 1/2 by 2	700	.44	245	do.	400	.57	9	Do.
1 1/2 by 2 1/2	1,800	.48	245	do.	1,150	.63	9	Do.
1 1/2 by 2 1/2	1,700	.53	245	do.	1,700	.69	9	Do.
1 1/2 by 3	1,000	.88	245	do.	1,600	.75	9	Do.
1 1/2 by 3	900	.98	245	do.	100	.88	9	Do.
1 1/2 by 3 1/2	1,250	.75	245	do.	800	.97	9	Do.
1 1/2 by 3 1/2	1,600	.86	245	do.	650	1.05	9	Do.
1 1/2 by 3 1/2	1,050	.88	245	do.	500	1.13	9	Do.
1 1/2 by 3 1/2	None.				None.			
Bolts, window, spring, cast-brass bolts, screw socket.	33 1/2	1.40	121	Chicago.	29	2.50	9	Do.
Braces, ratchet, B. B. 10-inch sweep, nickel or rustless finish.								
Brads, steel wire, in 1-pound packages:								
1-inch, No. 20 gauge.	35 pounds 1/2	.19	78	do.	23 pounds.	.23	9	Do.
1-inch, No. 18 gauge.	78 pounds 1/2	.117	78	do.	42 pounds.	.14	9	Do.
1-inch, No. 17 gauge.	140 pounds 1/2	.09	121	do.	109 pounds.	.10	9	Do.
1-inch, No. 16 gauge.	115 pounds 1/2	.075	121	do.	88 pounds.	.08	9	Do.
1-inch, No. 15 gauge.	96 pounds 1/2	.07	78	do.	66 pounds.	.08	9	Do.
Butts, brass, middle:								
11-inch.	16 dozen pairs 1/2	.45	121	do.	13 dozen pairs.	.67	9	Do.
11-inch.	30 dozen pairs 1/2	.74	121	do.	17 dozen pairs.	1.03	9	Do.
11-inch.	16 dozen pairs 1/2	1.37	121	do.	do.	1.90	9	Do.
Butts, loose pin, steel:								
2 1/2 by 2 1/2 inches.	34 1/2 dozen pairs 1/2	.76	121	do.	20 dozen pairs.	1.00	9	Do.
3 by 2 1/2 inches.	24 1/2 dozen pairs 1/2	1.00	121	do.	3 dozen pairs.	1.22	9	Do.
3 by 3 inches.	24 1/2 dozen pairs 1/2	1.10	121	do.	2 dozen pairs.	1.45	9	Do.
3 1/2 by 3 inches.	40 dozen pairs 1/2	1.68	121	do.	20 dozen pairs.	2.10	9	Do.
4 by 4 inches.	13 1/2 dozen pairs 1/2	2.08	121	do.	do.	2.58	9	Do.
4 1/2 by 4 inches.	None.				None.			
Call pen, spring 6-inch, Yankee pattern:								
Outside.	7	.63	148	St. Louis.	do.			
Inside.	6	.68	148	do.	do.			
Call pen, steel:								
No. 1.	175 pounds.	.08	5	Pittsburgh, Pa.	do.			
No. 2.	570 pounds.	.08	5	do.	30 pounds.	.10	9	Do.
No. 3.	820 pounds.	.08	5	do.	do.	.10	9	Do.

Cards, cattle, leather back, bound edge.....	123 1		20	121	Chicago	None.		9	Da.
Oscaches (or turns), cupboard, wrought steel, bronzed, metal knob, good quality, and heavy.	400		.085	83	New York	387	.12		
Chairs:	None					8	1.105	9	Da.
Log, 4-inch, short links, with swivel, ordinary hook and grab hook; 10, 12, 14, and 16 feet, as required, per pound.						39	1.155	9	Da.
Log, 4-inch, short links, with swivel, ordinary hook and grab hook; 10, 12, 14, and 16 feet, as required, per pound.						9 pairs	1.50	9	Da.
Trace, 7 feet long about 10 links to the foot, 1 wire gauge, with ring and swivel.						None			
Well, 24 inches long, with hook and ring.						10 gross	1.50	9	Da.
Chalk lines, assorted colors.	9 1/2 gross		1.05	121	Chicago	17 dozen	.45	9	Da.
Chisels, cast steel, cold, octagon, 1 by 7 inches.	24 dozen		.35	92	New York	18	.14	9	Da.
Chisels, cast steel, socket, corner, 1-inch, handled.	100 1/2		1.75	121	Chicago	None			
Chisels, cast steel, socket, firmer, sharpened, edges beveled, leather-top handles:	4 1/2								
1-inch.....	43 1/2		.55	121	do.	8	.52	9	Da.
1 1/2-inch.....	36 1/2		.50	121	do.	7	.52	9	Da.
2-inch.....	30 1/2		.50	121	do.	8	.52	9	Da.
3-inch.....	33 1/2		.55	121	do.	7	.60	9	Da.
4-inch.....	36 1/2		.60	121	do.	8	.60	9	Da.
5-inch.....	38 1/2		.60	121	do.	7	.75	9	Da.
6-inch.....	13 1/2		.70	121	do.	6	.75	9	Da.
7-inch.....	14 1/2		.75	121	do.	5	.79	9	Da.
8-inch.....	12 1/2		.85	121	do.	5	.92	9	Da.
Chisels, cast steel, socket, framing oval back, sharpened and handled:									
1-inch.....	5 1/2		.60	121	do.	None			
1 1/2-inch.....	6 1/2		.60	121	do.	do.			
2-inch.....	6 1/2		.60	121	do.	do.			
3-inch.....	6 1/2		.66	121	do.	do.			
4-inch.....	5 1/2		.75	121	do.	do.			
5-inch.....	5 1/2		.80	121	do.	do.			
6-inch.....	5 1/2		.87	121	do.	do.			
7-inch.....	5 1/2		1.10	121	do.	do.			
Clamps:									
Malleable, carriage, 10-inch.....	10 1/2		1.25	121	do.	22	1.75	9	Da.
Saw, 4-inch jaw.....	7		.70	121	do.	6	1.25	9	Da.
Cleavers, butcher's, 10-inch.....	None					19	2.50	9	Da.
Clippers, toilet, good quality, B. B.....	do.					143	1.50	9	Da.
Clot:						None			
Emery, assorted, per quire.....	65 quires 1		1.00	114	St. Louis	None			
Wire, for screens, 14-mesh; assorted widths as may be required, in full rolls of 100 lineal feet—									
Black.....									
Galvanized.....									
Cocks, brass, racking, to screw, loose key, 1-inch.	6,100 feet 1		.026	121	Chicago	do.			
	39,780 feet 1		.0265	121	do.	19,000 square feet	.0335	9	San Francisco.
	None					None			

1 Per pound.

1 Only.

## HARDWARE—Continued.

Articles.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Cocks, compression gauge, without stuffing box (for low-pressure boilers):	17 <sup>1</sup>	\$0.40	121	Chicago.	None.			
1/4-inch pipe thread.	None.		121	do.	do.			
Cocks, compression gauge, with stuffing box (for high-pressure boilers):	13 <sup>1</sup>	.51	121	do.	do.			
1/4-inch pipe thread.	7 <sup>1</sup>	.54	121	do.	do.			
1/4-inch pipe thread.	8 <sup>1</sup>	.61	121	do.	do.			
1/4-inch pipe thread.	21 <sup>1</sup>	.065	121	do.	do.			
Crossbars, wood handle, cut worm or wire.	13 <sup>1</sup>	.065	114	St. Louis.	do.			
Crowbars, solid steel, wedge point, assorted sizes, per pound.	10 <sup>1</sup>	4.75	121	Chicago.	17	\$0.10	9	San Francisco.
Cutters, bolt, for 1/4-inch.	31 sets <sup>1</sup>	2.25	121	do.	9	5.50	9	Do.
Extra jaws for cutters, bolt, for 1/4-inch.	17 <sup>1</sup>	.80	121	do.	5 sets	2.00	9	Do.
Dividers, c. s., wing:	7 <sup>1</sup>	.80	121	do.	8	.84	9	Do.
6-inch.					7	.65	9	Do.
10-inch.								
Drill:	5 <sup>1</sup>	8.50	121	do.	2	16.00	235	Do.
Blacksmith's, vertical, 2-speed.	6	2.66	169	Millers Falls, Mass.	5	2.66	169	United States of America.
Breast, 2-speed, to hold either square or round shank.	37 sets <sup>1</sup>	2.06	171	Chicago.	23 sets	2.50	9	San Francisco.
Bistock, assorted, 1/4 to 1/2 inch by 32ds.; 11 to the set.	34 sets.	3.50	148	St. Louis.	19 sets	3.95	9	Do.
Straight shank, jobber's, assorted, 1/4 to 1/2 inch by 32ds.; 15 to the set.	26 sets <sup>1</sup>	1.93	121	Chicago.	None.			
Wood boring, brace, assorted, 1/4 to 1/2 inch by 32ds.	39 <sup>1</sup>	.12	123	St. Louis.	8	.07	9	Do.
Faucets, wrod, cork-lined, best, No. 6.	None.				None.			
Files, flat, bastard:	do.				do.			
10-inch.								
12-inch.								
Files, cabinet:	do.							
12-inch.								
14-inch.								
Files, half round, bastard:	do.							
10-inch.								
12-inch.								

[illegible]

\* Additional orders under 25 per cent clause of contract at contractor's option.

**Only.**

## HARDWARE—Continued

Article.	Bids opened in St. Louis May 7, 1918.			Bids opened in San Francisco June 19, 1918.				
	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.
Glasses, gauge—Continued.								
by 18 inches.....	None.....	\$4.28	245	New York.....	None.....			
by 20 inches.....	do.....	4.82	245	do.....	do.....			
by 22 inches.....	do.....	5.28	245	do.....	do.....			
by 24 inches.....	do.....	6.75	245	do.....	do.....			
Gaskets, gauge glass:								
1-inch.....	2 dozen.....	.14	56	Chicago.....	do.....			
1-inch.....	16 dozen.....	.14	56	do.....	6 dozen.....	\$0.12	9	San Francisco.
1-inch.....	75 1/2 dozen.....	.14	56	do.....	16 dozen.....	.13	9	Do.
1-inch.....	65 dozen.....	.14	56	do.....	8 dozen.....	.17	9	Do.
1-inch.....	61.....	.75	121	do.....	5.....	.75	9	Do.
Gluepots, No. 1, porcelain or tin lined.....								
Gauges, c. s., socket, flumer sharpened, leather top handles:								
1-inch.....	71.....	.70	121	do.....	6.....	.75	9	Do.
1-inch.....	71.....	.70	121	do.....	6.....	.80	9	Do.
1-inch.....	71.....	.75	121	do.....	6.....	.85	9	Do.
1-inch.....	81.....	.85	121	do.....	6.....	.90	9	Do.
1-inch.....	81.....	.85	121	do.....	6.....	1.00	9	Do.
1-inch.....	71.....	.90	121	do.....	6.....	1.05	9	Do.
Grease, cup:								
If in 5 or 10-pound tins.....	2,840 pounds.....	.10	239	San Francisco.....	630 pounds.....	.10	239	Do.
If in 25 or 50 pound tins.....		.09	239	do.....		.09	239	Do.
Grindstones, mounted, ball-bearing, steel frame and seat, double-treadle, front shield:								
Weight, complete, 75 pounds.....	6.....	2.85	226	Aurora, Ill.....	2.....	4.50	9	Do.
Weight, complete, 100 pounds.....	1.....	3.35	226	do.....	None.....			
Weight, complete, 150 pounds.....	21.....	8.10	121	Chicago.....	do.....			
Weight, complete, 175 pounds.....	None.....				do.....			
Grindstones, unmounted, per pound:								
Weighting 50 pounds.....	1.....	.01 1/2	226	Aurora, Ill.....	2.....	.0275	9	Do.
Weighting 100 pounds.....	3.....	.01 1/2	226	do.....	None.....			
Weighting 150 pounds.....	2.....	.01 1/2	226	do.....	do.....			
Weighting 250 pounds.....	2.....	.015	226	do.....	do.....			
Grindstone fixtures, 17-inch improved patent cap, extra heavy.	23 1/2.....	.37	121	Chicago.....	8.....	.73	9	Do.
Handles:								
Chisel, socket, leather top, assorted.....	22 dozen 1.....	.40	121	do.....	13.....	.06	9	Do.
File, malleable iron, timed, adjustable clamp.....	40 1.....	.09	121	do.....	None.....			



## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.
Hinges, hinge:								
6-inch.	60 $\frac{1}{2}$ dozen <sup>1</sup>	\$0.92	121	Chicago	26 dozen	\$1.32	9	San Francisco.
10-inch.	11 dozen <sup>1</sup>	1.73	121	do.	7 $\frac{1}{2}$ dozen	2.40	9	Do.
Hinges, 1								
8-inch, heavy.	10 $\frac{1}{2}$ dozen pairs <sup>1</sup>	1.55	121	do.	5 $\frac{1}{2}$ dozen pairs	2.16	9	Do.
10-inch, heavy.	21 $\frac{1}{2}$ dozen pairs <sup>1</sup>	2.30	121	do.	1 dozen pairs	3.12	9	Do.
12-inch, heavy.	21 $\frac{1}{2}$ dozen pairs <sup>1</sup>	3.20	121	do.	None			
6-inch, light.	22 $\frac{1}{2}$ dozen pairs <sup>1</sup>	.84	121	do.	6 dozen pairs	1.15	9	Do.
Hinges, strap:								
32 dozen pairs, 8-inch, heavy.	21 $\frac{1}{2}$ dozen pairs <sup>1</sup>	2.22	121	do.	do.	3.12	9	Do.
19-inch, heavy.	5 $\frac{1}{2}$ dozen pairs <sup>1</sup>	2.70	121	do.	1 dozen pairs	4.76	9	Do.
12-inch, heavy.	2 $\frac{1}{2}$ dozen pairs <sup>1</sup>	5.16	121	do.	3 $\frac{1}{2}$ dozen pairs	1.48	9	Do.
6-inch, light.	9 $\frac{1}{2}$ dozen pairs <sup>1</sup>	1.02	121	do.	33 dozen pairs	2.44	9	Do.
8-inch, light.	9 $\frac{1}{2}$ dozen pairs <sup>1</sup>	1.44	121	do.	2 dozen pairs	2.04	9	Do.
10-inch, light.	7 $\frac{1}{2}$ dozen pairs <sup>1</sup>	1.98	121	do.	1 dozen pairs	2.80	9	Do.
12-inch, light.	1 $\frac{1}{2}$ dozen pairs <sup>1</sup>	2.94	121	do.	None			
Hooks, hat and coat, 2-prong, schoolhouse pattern, heavy, japanned.	73 dozen <sup>1</sup>	.80	121	do.	70 dozen	.36	9	Do.
Iron band, American, per 100 pounds:				St. Louis.				
500 pounds <sup>1</sup>	500 pounds <sup>1</sup>	4.05	220	do.		5.50	9	Do.
600 pounds <sup>1</sup>	600 pounds <sup>1</sup>	3.90	220	do.		5.30	9	Do.
300 pounds <sup>1</sup>	300 pounds <sup>1</sup>	3.85	220	do.	1,633 pounds			
750 pounds <sup>1</sup>	750 pounds <sup>1</sup>	3.86	220	do.		5.70	9	Do.
1,000 pounds <sup>1</sup>	1,000 pounds <sup>1</sup>	3.86	220	do.		5.70	9	Do.
1,000 pounds <sup>1</sup>	1,000 pounds <sup>1</sup>	3.86	220	do.		5.15	9	Do.
Iron band, American, per 100 pounds:								
1,400 pounds <sup>1</sup>	1,400 pounds <sup>1</sup>	3.85	220	do.		5.40	9	Do.
1,440 pounds <sup>1</sup>	1,440 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
270 pounds <sup>1</sup>	270 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
1,200 pounds <sup>1</sup>	1,200 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
320 pounds <sup>1</sup>	320 pounds <sup>1</sup>	3.70	220	do.				
100 pounds <sup>1</sup>	100 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
600 pounds <sup>1</sup>	600 pounds <sup>1</sup>	3.70	220	do.	3,880 pounds	5.25	9	Do.
770 pounds <sup>1</sup>	770 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
300 pounds <sup>1</sup>	300 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
500 pounds <sup>1</sup>	500 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
600 pounds <sup>1</sup>	600 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
1,600 pounds <sup>1</sup>	1,600 pounds <sup>1</sup>	3.70	220	do.		5.25	9	Do.
1,120 pounds <sup>1</sup>	1,120 pounds <sup>1</sup>	3.60	220	do.		5.15	9	Do.

by 14.	320 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 2.	600 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 24.	400 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 8.	650 pounds <sup>1</sup> .....	2.60	220	do.	do.			Do.
by 3.	650 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 1.	570 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 1.	500 pounds <sup>1</sup> .....	2.60	220	do.	do.			Do.
by 1.	800 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 1.	200 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 1.	1,450 pounds <sup>1</sup> .....	2.70	220	do.	do.	8.15	9	Do.
by 1.	145 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 1.	750 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 1.	1,250 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 2.	400 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 2.	600 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 2.	700 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 2.	1,000 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
by 2.	800 pounds <sup>1</sup> .....	2.60	220	do.	do.			Do.
Iron, refined, round, American, per 100 pounds:								
1-inch.	2,185 pounds <sup>1</sup> .....	2.96	220	do.	do.	8.80	9	San Francisco.
1-inch.	3,880 pounds <sup>1</sup> .....	2.85	220	do.	do.	8.40	9	Do.
1-inch.	2,400 pounds <sup>1</sup> .....	2.80	220	do.	do.	8.35	9	Do.
1-inch.	4,390 pounds <sup>1</sup> .....	2.75	220	do.	do.	8.25	9	Do.
1-inch.	645 pounds <sup>1</sup> .....	2.75	220	do.	do.	8.25	9	Do.
1-inch.	3,600 pounds <sup>1</sup> .....	2.70	220	do.	do.	8.20	9	Do.
1-inch.	2,775 pounds <sup>1</sup> .....	2.65	220	do.	do.	8.15	9	Do.
1-inch.	1,450 pounds <sup>1</sup> .....	2.65	220	do.	do.	8.15	9	Do.
1-inch.	1,100 pounds <sup>1</sup> .....	2.60	220	do.	do.	8.15	9	Do.
Iron, sheet, per 100 pounds:								
Junata, galvanized, 30 by 96 inches, No. 26.	1,825 pounds <sup>1</sup> .....	7.47	278	do.	do.	7.47	278	St. Louis.
One pass cold-rolled sheets, 16 gauge, size 30 by 96 inches, $\frac{1}{16}$ inch thick.	675 pounds <sup>1</sup> .....	5.72	278	do.	do.			
One pass cold-rolled sheets, 26 gauge, size 30 by 96 inches.	300 pounds <sup>1</sup> .....	6.43	278	do.	do.	6.43	278	Do.
Iron, refined, square, American, per 100 pounds:								
1-inch.	725 pounds.....	2.85	220	do.	do.			
1-inch.	925 pounds.....	2.75	220	do.	do.			
1-inch.	625 pounds.....	2.70	220	do.	do.			
1-inch.	600 pounds.....	2.65	220	do.	do.			
1-inch.	1,300 pounds.....	2.60	220	do.	do.			
Knives:								
Table, nickel-silver, medium size, plain oval handle, to match table forks and spoons offered.	364 dozen <sup>1</sup> .....	1.90	121	Chicago.....	Chicago.....	2.60	216	San Francisco.
Bread, thin blade, good quality.	108 <sup>1</sup> .....	.10	121	do.	do.			
Butcher, 8-inch, beech handle, without bolster, good quality.	33 $\frac{1}{2}$ dozen.....	2.75	147	New Britain, Conn.....		.24	122	St. Louis.
Carving, and forks, forged, with bolster, and guard, genuine stag handled, per set.	36 sets <sup>1</sup> .....	1.38	122	St. Louis.....		3.60	9	San Francisco.
Chopping, hollow iron handle, forged blade 23 <sup>1</sup> .....		.08	121	Chicago.....		1.90	216	Do.

<sup>1</sup> Only.

<sup>2</sup> Per pound.

<sup>3</sup> Additional orders under 25 per cent clause of contract at contractor's option.

<sup>4</sup> Subject to 7 cents per hundred weight increase to cover advances in freight charges.



## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of con-tractor.	Point of delivery.
Knives, drawing, c. s., carpenter's, hollow-ground:								
10-inch.....	17 1/2	\$1.04	122	St. Louis.....	6.....	\$1.10	9	San Francisco.
12-inch.....	7 1/2	1.20	122	do.....	3.....	1.25	9	Do.
Knives:								
Horsehoeing, assorted widths, bone handle.	42 1/2	.45	121	Chicago.....	17.....	.50	9	Do.
Putty, with bolster.....	183	.10 1/2	147	New Britain, Conn.....	30.....	.25	9	Do.
Skinning, 6-inch, beech handle, without bolster.	57 1/2	.80	121	Chicago.....	None.....			
Latches, thumb, heavy, all wrought.	9 1/2 dozen 2	1.25	121	do.....	9.....	1.25	9	Do.
Levels, spirit, with plumb, 30-inch, adjustable.	17 1/2	.90	121	do.....				
Locks:								
Closet, rim, dead, 2-tumbler, 3 1/2-inch, brass bolt, with key.	15 1/2 dozen 1	3.00	121	do.....	None.....			
Drawer, 2-tumbler, 2 1/2 by 2 inches, iron, with key.	18 1/2 dozen 1	3.24	121	do.....	do.....			
Horizontal rim, porcelain knob, 4-inch, brass bolt, with key.	29 1/2 dozen 1	5.00	121	do.....	do.....			
Horizontal rim, porcelain knob, 4 1/2-inch, brass bolt, with key.	17 1/2 dozen 1	5.00	121	do.....	do.....			
Horizontal rim, porcelain knob, 5-inch, brass bolt, with key.	11 1/2 dozen 1	5.75	121	do.....	do.....			
Horizontal rim, porcelain knob, 6-inch, brass bolt, with key.	None.....				do.....			
Spring, pad, iron or brass, 3-tumbler or more, 2 keys each, assorted combinations on each shipping order; suitable for outside use; good quality.	131 dozen 1	9.12	122	St. Louis.....	do.....			
Spring, pad, iron or brass, 3-tumbler, 2 keys each, assorted combinations on each shipping order; suitable for inside use; good quality.	69 1/2 dozen 1	4.00	121	Chicago.....	do.....			
Sash, heavy wrought or cast, bronzed:								
Let set, 30-inch, mortise, jet knobs, bronzed.	43 1/2 dozen 1	.50	121	do.....	do.....			
Let set, 36-inch, mortise, jet knobs, bronzed.	73 1/2 dozen 1	6.75	121	do.....	do.....			
Let set, 42-inch, mortise, jet knobs, bronzed.								
Bois and lace, with key.								
Mallets, carpenter's, hickory, round, 6 by 4 inches.	19 1/2	.15	121	do.....	11.....	.44	9	Do.
Measures, tape, 75-foot, linen tape and leather case.	33 1/2	.50	121	do.....	None.....			

	30 M <sup>1</sup> .....	.90	78 .....do.....	13 M <sup>1</sup> .....	1.30	124	Do
Nails, silt, upholsterer's, size 45, packed 20 <sup>1</sup> / <sub>2</sub> per 1,000.							
Nails, wire, steel, per 100 pounds:							
3-penny, bath.....	3,900 pounds.....	{ 4.25 4.40 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 1,350 pounds <sup>1</sup> .....	5.03	245	
3-penny.....	4,750 pounds.....	{ 3.95 4.16 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 1,005 pounds <sup>1</sup> .....	5.33	265	
4-penny.....	2,000 pounds.....	{ 3.80 4.01 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 1,435 pounds <sup>1</sup> .....	5.18	265	
6-penny.....	6,750 pounds.....	{ 3.70 3.91 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 3,350 pounds <sup>1</sup> .....	5.08	265	
8-penny.....	73,400 pounds.....	{ 3.60 3.81 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 10,350 pounds <sup>1</sup> .....	4.98	265	
10-penny.....	13,000 pounds.....	{ 3.55 3.76 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 6,015 pounds <sup>1</sup> .....	4.93	265	
12-penny.....	4,600 pounds.....	{ 3.55 3.76 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 3,110 pounds <sup>1</sup> .....	4.93	265	
20-penny.....	13,850 pounds.....	{ 3.60 3.71 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 6,175 pounds <sup>1</sup> .....	4.88	265	
30-penny.....	5,700 pounds.....	{ 3.60 3.71 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 2,425 pounds <sup>1</sup> .....	4.88	265	
40-penny.....	5,500 pounds.....	{ 3.60 3.71 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 2,200 pounds <sup>1</sup> .....	4.88	265	
60-penny.....	5,700 pounds.....	{ 3.60 3.71 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 3,400 pounds <sup>1</sup> .....	4.88	265	
Fence, 8-penny.....	300 pounds.....	{ 3.60 3.81 }	5 F. o. b. Rankin or Farrell, Pa. Joliet or De Kalb, Ill.	{ 350 pounds.....	4.98	265	

Prices specified are for San Francisco delivery. If taken at Eastern Mills, the base price, Pittsburgh district, is \$3.50 per 100 pounds, or Chicago district, \$3.715 per 100 pounds; both prices f. o. b. mill (stripping point).

<sup>1</sup> Subject to stock on hand.

<sup>2</sup> Only.

<sup>3</sup> Additional orders under 25 per cent clause of contract, subject to contractor's option.

## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.			Bids opened in San Francisco June 19, 1918.				
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Nails, wire, steel, per 100 pounds:—Continued.								
Fence, 10-penny .....	500 pounds.	\$3.55 3.765	5 5	F. o. b. Rankin or Farrell, Pa. F. o. b. Joliet or De Kalb, Ill.	100 pounds.	\$4.93	265	Prices specified are for San Francisco delivery. If taken at Eastern Mills, the base price, Pittsburgh district, is \$3.50 per 100 pounds, or Chicago district, \$3.75 per 100 pounds; both prices f. o. b. mill (shipping point).
Fence, 12-penny .....	200 pounds.	3.55 3.765	5 5	F. o. b. Rankin or Farrell, Pa. F. o. b. Joliet or De Kalb, Ill.	50 pounds <sup>1</sup> .	4.93	265	
Finishing, 6-penny .....	3,400 pounds.	3.95 4.165	5 5	F. o. b. Rankin or Farrell, Pa. F. o. b. Joliet or De Kalb, Ill.	2,185 pounds <sup>1</sup> .	5.33	265	
Finishing, 8-penny .....	4,800 pounds.	3.85 4.065	5 5	F. o. b. Rankin or Farrell, Pa. F. o. b. Joliet or De Kalb, Ill.	2,030 pounds <sup>1</sup> .	5.23	265	
Finishing, 10-penny .....	3,100 pounds.	3.75 3.965	5 5	F. o. b. Rankin or Farrell, Pa. F. o. b. Joliet or De Kalb, Ill.	925 pounds <sup>1</sup> .	5.13	265	
Nails, horseshoe, per 100 pounds:								San Francisco.
No. 6.....	845 pounds <sup>2</sup> .	14.50	121	Chicago.	395 pounds.	16.04	34	Do.
No. 7.....	855 pounds <sup>2</sup> .	14.50	121	do.	150 pounds.	15.31	34	Do.
No. 8.....	495 pounds <sup>2</sup> .	14.50	121	do.	125 pounds.	14.38	34	Do.
Nails, oxshoe, No. 5.....	50 pounds.	16.60	92	New York.	25 pounds.	18.00	9	Do.
Nippers, shoeing, good quality.....	10 "	.70	121	Chicago.	10 "	.80	9	Do.
Nuts, iron, square, blank, hot-punched:								
For 1-inch bolt.....	16 pounds <sup>2</sup> .	.107	220	St. Louis.	None.			
For 1 1/2-inch bolt.....	19 pounds <sup>2</sup> .	.095	220	do.	do.			
For 2-inch bolt.....	218 pounds <sup>2</sup> .	.08	220	do.	do.			
For 3-inch bolt.....	305 pounds <sup>2</sup> .	.065	220	do.	do.			
For 4-inch bolt.....	270 pounds <sup>2</sup> .	.062	220	do.	80 pounds.	.10	9	Do.
For 5-inch bolt.....	245 pounds <sup>2</sup> .	.06	220	do.	155 pounds.	.10	9	Do.
For 6-inch bolt.....	326 <sup>2</sup> .	.135	121	Chicago.	None.			
Oilers, mowing machine, copper-plated steel, No. 14 style, capacity about 1 pint, wide mouth, 5-inch straight spout.	58 <sup>2</sup> .	.17	121	do.	19.	.21	9	Do.
Oilstones, Washita, composition, or carborundum.								

[illegible]

**Additional orders under 25 per cent clause of contract at contractor's option.**

**Only.**

**Subject to stock on hand.**

## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Screws, flat-head, bright, per gross—Continued.</b>								
2 1/2-inch, No. 14.....	20 gross 1	\$0.51	78	Chicago.....	8 gross.....	\$0.52	9	San Francisco
2 1/2-inch, No. 15.....	2 gross 1	.58	78	do.....	None.....			
3-inch, No. 15.....	16 gross 1	.74	78	do.....	5 gross.....	1.20	9	Do.
3-inch, No. 18.....	7 gross 1	.963	78	do.....	1 gross.....	1.53	9	Do.
<b>Shears, c. s., japanned handle, straight, trim-</b>								
<b>mers, good quality:</b>								
8-inch.....	11 1/2 dozen 1	6.25	121	do.....	5 1/2 dozen.....	9.31	9	Do.
10-inch.....	4 1/2 dozen 1	9.67	121	do.....	3 1/2 dozen.....	14.50	9	Do.
<b>Shears, turner's, hand, drop forged, steel laid</b>								
<b>blades, hardened and tempered:</b>								
No. 7.....	9 1/2.....	1.75	121	do.....	7.....	2.25	9	Do.
No. 9.....	12 1/2.....	1.22	121	do.....	1,028 pounds 1	1.60	9	Do.
<b>Solder, 50 parts pure tin, 50 parts pure lead,</b>								
<b>warranted:</b>								
Soldering tins, per pound:								
1 pound each.....	do.....				28 pairs 1	.45	278	St. Louis.
2 pounds each.....	do.....				10 pairs 1	.45	278	Do.
<b>Shoes, ho. &amp; light, assorted, front and hind, per</b>								
<b>100 pounds:</b>								
No. 0.....	250 pounds.....	5.50	(*)	Pittsburgh.....	650 pounds 1	7.35	265	Prices specified are for San Francisco delivery. If taken delivered at mill, base price \$5.85 per 100 pounds f. o. b. mill, Pittsburgh, Pa.
No. 1.....	1,350 pounds.....	5.50	(*)	do.....	1,075 pounds 1	7.35	265	
No. 2.....	2,500 pounds.....	5.25	(*)	do.....	2,325 pounds 1	7.13	265	
No. 3.....	2,850 pounds.....	5.25	(*)	do.....	1,475 pounds 1	7.10	265	
No. 4.....	2,250 pounds.....	5.25	(*)	do.....	1,110 pounds 1	7.10	265	
No. 5.....	2,375 pounds.....	5.25	(*)	do.....	475 pounds 1	7.10	265	
No. 6.....	925 pounds.....	5.25	(*)	do.....	75 pounds 1	7.10	265	
<b>Shoes, mule, per 100 pounds:</b>								
No. 2.....	250 pounds.....	5.25	(*)	do.....	300 pounds 1	7.10	265	San Francisco.
No. 3.....	700 pounds.....	5.25	(*)	do.....	950 pounds 1	7.10	265	
No. 4.....	250 pounds.....	5.25	(*)	do.....	1,200 pounds 1	7.10	265	
<b>Shovels, fire, hand, long wrought-iron handle,</b>								
<b>heavy and strong:</b>								
Spoons, plain, nickel silver, to match knives								
and forks offered:								
Table.....	178 dozen 1	1.72	121	do.....	56 dozen 1	1.73	216	Do.
Ten.....	440 dozen 1	.8625	121	do.....	185 dozen 1	.86	216	Do.
Springs, door, spiral, heavy, 10-inch.....	21 dozen 1	2.55	121	do.....	18 1/2 dozen.....	1.68	9	Do.
Squares, framing, steel, 2 inches wide, with								
rather scale.	20 dozen 1	1.15	121	do.....	None.....			

[illegible]

Only.

\* Additional orders under 25 per cent clause of contract at contractor's option.

• Allotted by War Industries Board and furnished by Phoenix Horse Shoe Co.

**\*Subject to stock on hand when order is received.**

## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Rivets, iron, oval head:</b>								
1/2 inch diameter, 1 1/2 inch long.....	9 pounds.....	\$0.1275	245	New York.....	None.....			San Francisco.
1/2 inch diameter, 1 inch long.....	16 pounds.....	.125	245	do.....	1 pound.....	\$0.25	9	Do.
1/2 inch diameter, 3/4 inch long.....	22 pounds.....	.105	245	do.....	None.....			Do.
1/2 inch diameter, 1 inch long.....	16 pounds.....	.105	245	do.....	7 pounds.....	.25	9	Do.
1/2 inch diameter, 2 inches long.....	28 pounds.....	.105	245	do.....	9 pounds.....	.25	9	Do.
1/2 inch diameter, 4 inches long.....	11 1/2 pounds.....	.10	245	do.....	None.....			Do.
1/2 inch diameter, 1 inch long.....	35 pounds.....	.083	245	do.....	10 pounds.....	.25	9	Do.
1/2 inch diameter, 1 1/2 inches long.....	45 pounds.....	.10	245	do.....	None.....			
1/2 inch diameter, 2 inches long.....	38 pounds.....	.10	245	do.....	do.....			
1/2 inch diameter, 2 1/2 inches long.....	10.....	.10	245	do.....	do.....			
1/2 inch diameter, 3 inches long.....	26 pounds.....	.085	245	do.....	do.....			
1/2 inch diameter, 3 1/2 inches long.....	21 pounds.....	.085	245	do.....	do.....			
1/2 inch diameter, 4 inches long.....	34 pounds.....			do.....	do.....			
<b>Rivets, timed iron, in packages of 1,000:</b>								
10-ounce.....	4,000.....	.17	114	St. Louis.....	2,000.....	.24	9	Do.
12-ounce.....	11,000.....	.19	114	do.....	5,000.....	.27	124	Do.
1-pound.....	9,000.....	.21	114	do.....	3,000.....	.32	9	Do.
1 1/2-pound.....	9,000.....	.28	114	do.....	1,000.....	.45	9	Do.
2-pound.....	5,000.....	.34	114	do.....	1,000.....	.50	124	Do.
2 1/2-pound.....	2,000.....	.32	121	Chicago.....	None.....			Do.
3-pound.....	218.....	.06	121	do.....	10 pairs.....	.075	9	Do.
126 pairs.....								
<b>Rules, boxwood, 2-foot, 4-fold, full brass bound.</b>								
<b>Sailor's, common, assorted, 5 to 8 pounds,</b>								
<b>polished face, wrought handles, per pound.</b>								
<b>Saw sets, lever:</b>								
For crosscut saws.....	61.....	.75	121	do.....	2.....	1.25	9	Do.
For hand saws.....	221.....	.35	121	do.....	10.....	.90	9	Do.
<b>Saws:</b>								
Back, 12-inch, blued back.....	141.....	1.35	121	do.....	None.....	.70	9	Do.
Back, complete, 30-inch blade, painted frames.....	21.....	.65	121	do.....	10.....			
Circular, 24-inch, crosscut.....	3.....	12.80	186	New York.....	None.....			
Circular, 24-inch, rip.....	1.....	12.80	186	do.....	do.....			
Circular, 30-inch, crosscut.....	4.....	16.80	186	do.....	do.....			
Circular, 30-inch, rip.....	None.....			do.....	do.....			
Compass, 12-inch.....	421.....	.40	121	Chicago.....	do.....			
Grosscut, 5-foot, with handles.....	61.....	2.75	121	do.....	do.....			
Grosscut, 6-foot, with handles.....	141.....	3.10	121	do.....	do.....			
Hand, 24-inch, hollow back, 6 to 10 points to the inch.....	81.....	1.40	121	do.....	42.....	1.10	9	Do.
Meat, butcher's bow, 20-inch.....	141.....	.80	121	do.....	None.....			Do.
Rip, 28-inch, 4 and 5 points.....	241.....	.90	121	do.....	5.....	1.30	9	Do.

Butcher's dial face, spring balance, square pan, 30-pound, by ounces	16	3.35	245	New York	None			Do.
Hay and cattle, standard platform—10-ton	None							
Platform, counter, 240-pound	14	7.70	270	Binghamton, N. Y.	do			75
Platform, drop lever, on wheels:								
1,000-pound	21	22.45	121	do	2		33.00	75
1,500-pound	11	30.80	121	do	1		38.75	9
2,000-pound	None		121	do	None			
Scissors, ladies', 6-inch, c. s.	32½ dozen	6.86	92	New York	None			
Screw drivers:								
6-inch steel blade running through handle	89½	20	122	St. Louis	do			
8-inch steel blade running through handle	76½	26	122	do	do			
10-inch steel blade running through handle	43½	33	122	do	do			
Screws, wrought iron, bench, 1½-inch	11	84	121	Chicago	4		1.00	9
Screws, wood, bench, 2½-inch	None				None			
Screws, flat-head, bright, per gross:								
1-inch, No. 3	22 gross	127	78	Chicago	13 gross		20	9
1-inch, No. 4	35 gross	132	78	do	5 gross		21	9
1-inch, No. 5	15 gross	137½	78	do	11 gross		22	9
1-inch, No. 6	43 gross	132	78	do	7 gross		21	9
1-inch, No. 7	25 gross	137½	78	do	9 gross		22	9
1-inch, No. 8	15 gross	145	78	do	7 gross		23	9
1-inch, No. 9	70 gross	15	78	do	25 gross		24	9
1-inch, No. 10	45 gross	159	78	do	15 gross		25	9
1-inch, No. 11	77 gross	167½	78	do	21 gross		27	9
1-inch, No. 12	57 gross	166	78	do	10 gross		28	9
1-inch, No. 13	74 gross	176	78	do	18 gross		30	9
1-inch, No. 14	50 gross	185	78	do	21 gross		31	9
1-inch, No. 15	66 gross	172½	78	do	33 gross		30	9
1-inch, No. 16	82 gross	185	78	do	do		31	9
1-inch, No. 17	120 gross	194	78	do	14 gross		34	9
1-inch, No. 18	78 gross	212	78	do	44 gross		34	9
1-inch, No. 19	131 gross	212	78	do	43 gross		36	9
1-inch, No. 20	87 gross	229	78	do	21 gross		39	9
1-inch, No. 21	34 gross	247	78	do	34 gross		39	9
1-inch, No. 22	125 gross	247	78	do	18 gross		42	9
1-inch, No. 23	44 gross	264	78	do	20 gross		46	9
1-inch, No. 24	51 gross	29	78	do	4 gross		51	9
1-inch, No. 25	31 gross	30	78	do	17 gross		57	9
1-inch, No. 26	36 gross	317	78	do	None		49	9
1-inch, No. 27	19 gross	352	78	do	14 gross		57	9
1-inch, No. 28	47 gross	308	78	do	1 gross		62	9
2-inch, No. 1	2 gross	326	78	do	None			
2-inch, No. 2	25 gross	352	78	do	1 gross			
2-inch, No. 3	7 gross	387½	78	do	None			
2-inch, No. 4	15 gross	432	78	do	6 gross		75	9
2-inch, No. 5	9 gross	467	78	do	None			
2-inch, No. 6	do	537	78	do	None			

\* Additional orders under 25 per cent clause of contract at contractor's option.

† Only.



## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.
<b>Packing, sheet gasket rubber:</b>								
1-inch.....	35 pounds.....	\$0.42	90	St. Louis.....	45 pounds 1.....	\$0.225	99	San Francisco.
1-inch.....	32 pounds.....	.42	90	do.....	27 pounds 1.....	.225	99	Do.
1-inch.....	482 pounds.....	.42	90	do.....	15 pounds 1.....	.225	99	Do.
1-inch.....	25 pounds.....	.42	90	do.....	25 pounds.....	.225	99	Do.
<b>Packing, cloth inserted rubber sheet for gaskets:</b>								
1-inch.....	None.....		90	do.....	55 pounds.....	.45	90	Do.
1-inch.....	68 pounds.....	.35	90	do.....	75 pounds.....	.45	90	Do.
1-inch.....	137 pounds.....	.35	90	do.....	45 pounds.....	.45	90	Do.
1-inch.....	8 pounds.....	.35	90	do.....	10 pounds.....	.45	90	Do.
1-inch.....	122 pounds.....	.77	90	do.....	69 pounds.....	1.17	90	Do.
<b>Packing, twisted fiber graphite valve stem</b>								
Packing, hemp, square, best quality:								
1-inch.....	8 pounds.....	.28	90	do.....	10 pounds.....	.36	90	Do.
1-inch.....	1 pound.....	.28	90	do.....	None.....			
<b>Paper, sand (assorted), per quire.....</b>								
Pencils, carpenter's, 7-inch.....	500 quires 1.....	(9) .36	150	New York.....	273 cutlins.....	.34	9	Do.
Pine-bars, 1 jacksmith's, shoeing.....	118 dozen 1.....	.60	121	Chicago.....	51 dozen.....	.36	9	Do.
Planes, good quality, as follows:	13 1.....		121	do.....	3.....	1.10	9	Do.
Block 6-inch, knuckle joint.....	22 1.....	1.10	121	do.....	4.....	1.50	9	Do.
Fore, adjustable, wood or iron bottoms.....	3 1.....	1.65	121	do.....	5.....	2.80	9	Do.
Planes, wood-hollow and round, c. s.:								
1-inch.....	None.....				None.....			
11-inch.....	do.....				do.....			
14-inch.....	do.....				do.....			
<b>Planes:</b>								
Jack, adjustable, wood or iron bottoms.....	11 1.....	1.50	121	Chicago.....	8.....	2.10	9	Do.
Joiner's, adjustable, wood or iron bottoms.....	6 1.....	1.80	121	do.....	1.....	2.77	9	Do.
<b>Planes, match, iron:</b>								
1-inch.....	None.....				None.....			
1-inch.....	do.....				do.....			
<b>Planes:</b>								
Flow, embracing bending and center-head plane, rabbit and allister, dado, plow, matching and slitting plane.....	3 1.....	7.50	121	Chicago.....	do.....			
Dado, iron, 4-inch.....	2 1.....	1.70	121	do.....	do.....			
Rabbit, iron, 1-inch.....	None.....				do.....			
Rabbit, iron, 1 1/2-inch.....	3 1.....	1.30	121	Chicago.....	None.....			
Smooth, adjustable, wood or iron bottoms.....	7 1.....	1.50	121	do.....	2.....	1.75	9	Do.

[illegible]

only.

only.  
No. 2, \$0.2425 per quire; No. 1, \$0.25 per quire; No. 1½, \$0.2675 per quire; No. 2, \$0.285 per quire; No. 3, \$0.315 per quire; No. 4, \$0.425 per quire.

23 per quire.  
Nos. 1 to 6, \$0.08; Nos. 7 to 9, \$0.10; Nos. 10 to 12, \$0.12.

## HARDWARE—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of tractor.	Point of delivery.
Thermometers:								
Aerucial:	215 <sup>1</sup>	\$0.21	121	Chicago	None			United States of Amer- ica.
Spirit:	75 <sup>1</sup>	.3025	121	do	2	\$0.38	169	
Trimmers, spoke, adjustable.	5 <sup>1</sup>	.22	121	do				
Trowels:								
Pick, 10 $\frac{1}{2}$ -inch.	42 <sup>1</sup>	.38	121	do	5	1.05	9	San Francisco.
Tuyere (twice), iron, adjustable pattern, single,	15 <sup>1</sup>	.38	121	do	7	.50	9	Do.
heavy, with cleaning drop.	2	0.70	42 <sup>1</sup>	do	6	7.25	236	Do.
Vises:								
Blacksmith's, solid box, 6-inch jaw.	1 <sup>1</sup>	10.85	121	do	None			
Blacksmith's, solid box, 4 $\frac{1}{2}$ -inch	5 <sup>1</sup>	8.84	121	St. Louis.	do			
Square slide, 4-inch jaw	8	6.35	148	do	do			
Washers, iron, flat:								
For $\frac{1}{2}$ -inch bolt.	184 pounds <sup>1</sup>	.032	220	do	37 pounds.	.164	9	Do.
For $\frac{3}{4}$ -inch bolt.	153 pounds <sup>1</sup>	.084	220	do	28 pounds.	.18	9	Do.
For 1-inch bolt.	344 pounds <sup>1</sup>	.075	121	Chicago.	63 pounds.	.125	9	Do.
For 1 $\frac{1}{2}$ -inch bolt.	473 pounds <sup>1</sup>	.064	121	do	243 pounds.	.105	9	Do.
For 2-inch bolt.	377 pounds <sup>1</sup>	.061	220	St. Louis.	208 pounds.	.10	9	Do.
For 1-inch bolt.	228 pounds <sup>1</sup>	.08	220	do	134 pounds.	.075	9	Do.
Waste, cotton, white.	2,686 pounds	.136	92	New York	None			
Wedges, woodchopper's, solid steel, per pound:								
3-pound.	68 <sup>1</sup>	1.40	121	Chicago	41	.12	9	Do.
5-pound.	20 <sup>1</sup>	1.48	121	do				
Wire, annealed, blued:								
No. 6.	136 pounds <sup>1</sup>	.06	121	do	None			
No. 10.	126 pounds <sup>1</sup>	.0675	121	do	do			
No. 20.	None				do			
Wire, light iron:								
No. 3.	25 pounds <sup>1</sup>	.046	121	Chicago	None			
No. 6.	20 pounds <sup>1</sup>	.046	121	do	do			
No. 7.	None				do			
No. 8.	240 pounds <sup>1</sup>	.046	121	do	do			
No. 9.	240 pounds <sup>1</sup>	.046	121	do	do			
No. 10.	46 pounds <sup>1</sup>	.0465	121	do	do			
No. 11.	None				do			
No. 12.	330 pounds <sup>1</sup>	.0475	121	do	do			
No. 14.	30 pounds <sup>1</sup>	.0485	121	do	do			
No. 18.	None				do			
No. 18.	20 pounds <sup>1</sup>	.0545	121	do	do			

[illegible]

**PLUMBER'S AND STEAM AND GAS FITTER'S TOOLS, FITTINGS, AND SUPPLIES.**

	None	\$1.45	114	St. Louis.	None	\$1.26	San Francisco.
Cement, gas filter's, in 5-pound packages.....	None						
Cutters, pipe, 8-wheel:	3 1	\$1.45	114	St. Louis.	5 1	\$1.26	Do.
To cut 1 to 2 inches.....	14 1	1.95	114	do.	7 1	1.89	Do.
Furnaces, blast, gasline combination, hot	None				15	0.90	Do.
blast, compst, with settling pot.							
Ladies:							
6-inch.....	6 1	.40	241	Chicago	3	.20	Do.
6-inch.....	6 1	.80	241	do.	2	.56	Do.
Pilers, gas, forged:							
6-inch.....	31	.20	148	St. Louis	17	.55	Do.
12-inch.....	10 1	.60	121	Chicago	1	1.00	Do.
Ratchets, sleeve:							
Handles 10 inches long.....	2 1	4.50	121	do.	2	5.00	Do.
Handles 16 inches long.....	None				None		

**Each.**

<sup>3</sup> Additional orders under 25 per cent clause of contract at contractor's option.

Only.

## PLUMBER'S AND STEAM AND GAS FITTER'S TOOLS, FITTINGS, AND SUPPLIES—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Reamers, pipe:</b>								
1-inch.....	21	\$0.46	114	St. Louis.....	1	\$0.75	9	San Francisco.
1 1/2-inch.....	11	.61	114	do.....	1	1.00	9	do.
2-inch.....	1	.76	114	do.....	2	1.25	9	do.
3-inch.....	1	1.22	57	Chicago.....				
4-inch.....	1	1.50	57	do.....				
5-inch.....	1	2.03	57	do.....	1	3.13	9	Do.
<b>Stocks and dies, pipe, adjustable:</b>								
1 to 1 inch.....	7 sets 1	5.00	211	do.....	3 sets.	6.25	9	Do.
1 1/2 to 2 inches.....	9 sets 1	7.75	241	do.....	1 set.	10.00	9	do.
<b>Taps, pipe:</b>								
1-inch.....	21	.46	114	St. Louis.....	3	.75	9	do.
1 1/2-inch.....	41	.61	114	do.....	7	1.00	9	do.
2-inch.....	31	.76	114	do.....	1	1.25	9	do.
3-inch.....	21	1.00	121	Chicago.....	1	1.88	9	do.
4-inch.....	21	1.25	121	do.....	1	2.31	9	do.
5-inch.....	21	1.50	121	do.....	1	3.13	9	do.
6-inch.....	11	2.25	57	do.....	6	3.00	9	do.
<b>Vises, pipe, malleable iron, hinged, to hold 1 to 2 inch pipe.</b>								
10-inch.....	71	.77	114	St. Louis.....	21	.95	9	do.
18-inch.....	75	1.55	114	do.....	20	2.06	9	do.
PIPE FITTINGS.								
<b>Bibbs, lever handle, plain, finished, pipe thread:</b>								
1-inch.....	None.	\$0.52	177	Decatur, Ill.....	None.			
1 1/2-inch.....	do.	.58	147	New Britain, Conn.....	do.			
2-inch.....	114	.60	117	do.....	72	\$0.65	158	Dubuque, Iowa.
3-inch.....	118	.78	177	Decatur, Ill.....	20	.85	177	San Francisco.
4-inch.....	10.	1.50	147	New Britain, Conn.....	None.			
<b>Bibbs, lever handle, plain, finished, with thumb-screws, for lead pipe:</b>								
1-inch.....	None.			do.	do.			
1 1/2-inch.....	do.			do.	do.			
2-inch.....	do.			do.	do.			

Bibs, compression, plain, finished, pipe thread:	12.....	147	do.	North Chicago, Dubuque, Iowa.
1-inch	None	147	do.	98
1 1/2-inch	228	147	do.	158
2-inch	430	121	Chicago	60
2 1/2-inch	475	147	New Britain, Conn.	60
3-inch	490	147	do.	177
3 1/2-inch	515	177	Decatur, Ill.	94
4-inch	540	177	do.	177
4 1/2-inch	565	177	do.	177
5-inch	590	177	do.	177
5 1/2-inch	615	177	do.	177
6-inch	640	177	do.	177
6 1/2-inch	665	177	do.	177
7-inch	690	177	do.	177
7 1/2-inch	715	177	do.	177
8-inch	740	177	do.	177
8 1/2-inch	765	177	do.	177
9-inch	790	177	do.	177
9 1/2-inch	815	177	do.	177
10-inch	840	177	do.	177
10 1/2-inch	865	177	do.	177
11-inch	890	177	do.	177
11 1/2-inch	915	177	do.	177
12-inch	940	177	do.	177
12 1/2-inch	965	177	do.	177
13-inch	990	177	do.	177
13 1/2-inch	1015	177	do.	177
14-inch	1040	177	do.	177
14 1/2-inch	1065	177	do.	177
15-inch	1090	177	do.	177
15 1/2-inch	1115	177	do.	177
16-inch	1140	177	do.	177
16 1/2-inch	1165	177	do.	177
17-inch	1190	177	do.	177
17 1/2-inch	1215	177	do.	177
18-inch	1240	177	do.	177
18 1/2-inch	1265	177	do.	177
19-inch	1290	177	do.	177
19 1/2-inch	1315	177	do.	177
20-inch	1340	177	do.	177
20 1/2-inch	1365	177	do.	177
21-inch	1390	177	do.	177
21 1/2-inch	1415	177	do.	177
22-inch	1440	177	do.	177
22 1/2-inch	1465	177	do.	177
23-inch	1490	177	do.	177
23 1/2-inch	1515	177	do.	177
24-inch	1540	177	do.	177
24 1/2-inch	1565	177	do.	177
25-inch	1590	177	do.	177
25 1/2-inch	1615	177	do.	177
26-inch	1640	177	do.	177
26 1/2-inch	1665	177	do.	177
27-inch	1690	177	do.	177
27 1/2-inch	1715	177	do.	177
28-inch	1740	177	do.	177
28 1/2-inch	1765	177	do.	177
29-inch	1790	177	do.	177
29 1/2-inch	1815	177	do.	177
30-inch	1840	177	do.	177
30 1/2-inch	1865	177	do.	177
31-inch	1890	177	do.	177
31 1/2-inch	1915	177	do.	177
32-inch	1940	177	do.	177
32 1/2-inch	1965	177	do.	177
33-inch	1990	177	do.	177
33 1/2-inch	2015	177	do.	177
34-inch	2040	177	do.	177
34 1/2-inch	2065	177	do.	177
35-inch	2090	177	do.	177
35 1/2-inch	2115	177	do.	177
36-inch	2140	177	do.	177
36 1/2-inch	2165	177	do.	177
37-inch	2190	177	do.	177
37 1/2-inch	2215	177	do.	177
38-inch	2240	177	do.	177
38 1/2-inch	2265	177	do.	177
39-inch	2290	177	do.	177
39 1/2-inch	2315	177	do.	177
40-inch	2340	177	do.	177
40 1/2-inch	2365	177	do.	177
41-inch	2390	177	do.	177
41 1/2-inch	2415	177	do.	177
42-inch	2440	177	do.	177
42 1/2-inch	2465	177	do.	177
43-inch	2490	177	do.	177
43 1/2-inch	2515	177	do.	177
44-inch	2540	177	do.	177
44 1/2-inch	2565	177	do.	177
45-inch	2590	177	do.	177
45 1/2-inch	2615	177	do.	177
46-inch	2640	177	do.	177
46 1/2-inch	2665	177	do.	177
47-inch	2690	177	do.	177
47 1/2-inch	2715	177	do.	177
48-inch	2740	177	do.	177
48 1/2-inch	2765	177	do.	177
49-inch	2790	177	do.	177
49 1/2-inch	2815	177	do.	177
50-inch	2840	177	do.	177
50 1/2-inch	2865	177	do.	177
51-inch	2890	177	do.	177
51 1/2-inch	2915	177	do.	177
52-inch	2940	177	do.	177
52 1/2-inch	2965	177	do.	177
53-inch	2990	177	do.	177
53 1/2-inch	3015	177	do.	177
54-inch	3040	177	do.	177
54 1/2-inch	3065	177	do.	177
55-inch	3090	177	do.	177
55 1/2-inch	3115	177	do.	177
56-inch	3140	177	do.	177
56 1/2-inch	3165	177	do.	177
57-inch	3190	177	do.	177
57 1/2-inch	3215	177	do.	177
58-inch	3240	177	do.	177
58 1/2-inch	3265	177	do.	177
59-inch	3290	177	do.	177
59 1/2-inch	3315	177	do.	177
60-inch	3340	177	do.	177
60 1/2-inch	3365	177	do.	177
61-inch	3390	177	do.	177
61 1/2-inch	3415	177	do.	177
62-inch	3440	177	do.	177
62 1/2-inch	3465	177	do.	177
63-inch	3490	177	do.	177
63 1/2-inch	3515	177	do.	177
64-inch	3540	177	do.	177
64 1/2-inch	3565	177	do.	177
65-inch	3590	177	do.	177
65 1/2-inch	3615	177	do.	177
66-inch	3640	177	do.	177
66 1/2-inch	3665	177	do.	177
67-inch	3690	177	do.	177
67 1/2-inch	3715	177	do.	177
68-inch	3740	177	do.	177
68 1/2-inch	3765	177	do.	177
69-inch	3790	177	do.	177
69 1/2-inch	3815	177	do.	177
70-inch	3840	177	do.	177
70 1/2-inch	3865	177	do.	177
71-inch	3890	177	do.	177
71 1/2-inch	3915	177	do.	177
72-inch	3940	177	do.	177
72 1/2-inch	3965	177	do.	177
73-inch	3990	177	do.	177
73 1/2-inch	4015	177	do.	177
74-inch	4040	177	do.	177
74 1/2-inch	4065	177	do.	177
75-inch	4090	177	do.	177
75 1/2-inch	4115	177	do.	177
76-inch	4140	177	do.	177
76 1/2-inch	4165	177	do.	177
77-inch	4190	177	do.	177
77 1/2-inch	4215	177	do.	177
78-inch	4240	177	do.	177
78 1/2-inch	4265	177	do.	177
79-inch	4290	177	do.	177
79 1/2-inch	4315	177	do.	177
80-inch	4340	177	do.	177
80 1/2-inch	4365	177	do.	177
81-inch	4390	177	do.	177
81 1/2-inch	4415	177	do.	177
82-inch	4440	177	do.	177
82 1/2-inch	4465	177	do.	177
83-inch	4490	177	do.	177
83 1/2-inch	4515	177	do.	177
84-inch	4540	177	do.	177
84 1/2-inch	4565	177	do.	177
85-inch	4590	177	do.	177
85 1/2-inch	4615	177	do.	177
86-inch	4640	177	do.	177
86 1/2-inch	4665	177	do.	177
87-inch	4690	177	do.	177
87 1/2-inch	4715	177	do.	177
88-inch	4740	177	do.	177
88 1/2-inch	4765	177	do.	177
89-inch	4790	177	do.	177
89 1/2-inch	4815	177	do.	177
90-inch	4840	177	do.	177
90 1/2-inch	4865	177	do.	177
91-inch	4890	177	do.	177
91 1/2-inch	4915	177	do.	177
92-inch	4940	177	do.	177
92 1/2-inch	4965	177	do.	177
93-inch	4990	177	do.	177
93 1/2-inch	5015	177	do.	177
94-inch	5040	177	do.	177
94 1/2-inch	5065	177	do.	177
95-inch	5090	177	do.	177
95 1/2-inch	5115	177	do.	177
96-inch	5140	177	do.	177
96 1/2-inch	5165	177	do.	177
97-inch	5190	177	do.	177
97 1/2-inch	5215	177	do.	177
98-inch	5240	177	do.	177
98 1/2-inch	5265	177	do.	177
99-inch	5290	177	do.	177
99 1/2-inch	5315	177	do.	177
100-inch	5340	177	do.	177
100 1/2-inch	5365	177	do.	177
101-inch	5390	177	do.	177
101 1/2-inch	5415	177	do.	177
102-inch	5440	177	do.	177
102 1/2-inch	5465	177	do.	177
103-inch	5490	177	do.	177
103 1/2-inch	5515	177	do.	177
104-inch	5540	177	do.	177
104 1/2-inch	5565	177	do.	177
105-inch	5590	177	do.	177
105 1/2-inch	5615	177	do.	177
106-inch	5640	177	do.	177
106 1/2-inch	5665	177	do.	177
107-inch	5690	177	do.	177
107 1/2-inch	5715	177	do.	177
108-inch	5740	177	do.	177
108 1/2-inch	5765	177	do.	177
109-inch	5790	177	do.	177
109 1/2-inch	5815	177	do.	177
110-inch	5840	177	do.	177
110 1/2-inch	5865	177	do.	177
111-inch	5890	177	do.	177
111 1/2-inch	5915	177	do.	177
112-inch	5940	177	do.	177
112 1/2-inch	5965	177	do.	177
113-inch	5990	177	do.	177
113 1/2-inch	6015	177	do.	177
114-inch	6040	177	do.	177
114 1/2-inch	6065	177	do.	177
115-inch	6090	177	do.	177
115 1/2-inch	6115	177	do.	177
116-inch	6140	177	do.	177
116 1/2-inch	6165	177	do.	177
117-inch	6190	177	do.	177
117 1/2-inch	6215	177	do.	177
118-inch	6240	177	do.	177
118 1/2-inch	6265	177	do.	177
119-inch	6290	177	do.	177
119 1/2-inch	6315	177	do.	177
120-inch	6340	177	do.	177
120 1/2-inch	6365	177	do.	177
121-inch	6390	177	do.	177
121 1/2-inch	6415	177	do.	177
122-inch	6440	177	do.	177
122 1/2-inch	6465	177	do.	177
123-inch	6490	177	do.	177
123 1/2-inch	6515	177	do.	177
124-inch	6540	177	do.	177
124 1/2-inch	6565	177	do.	177
125-inch	6590	177	do.	177
125 1/2-inch	6615	177	do.	177
126-inch	6640	177	do.	177
126 1/2-inch	6665	177	do.	177
127-inch	6690	177	do.	177
127 1/2-inch	6715	177	do.	177
128-inch	6740	177	do.	177
128 1/2-inch	6765	177	do.	177
129-inch	6790	177	do.	177
129 1/2-inch	68			

## PIPE FITTINGS—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Couplings, wrought iron, galvanized, beaded:								
1-inch.....	74	\$0.03	57	Chicago.....	10 1/2	\$0.0375	62	San Francisco.
1 1/2-inch.....	78	.03	57	do.....	10 1/2	.0475	62	Do.
2-inch.....	283 1/2	.0456	211	do.....	36 1/2	.04	62	Do.
2 1/2-inch.....	485	.06	57	do.....	36 1/2	.06	62	Do.
3-inch.....	244	.09	57	do.....	36 1/2	.11	62	Do.
1 1/2-inch.....	195	.125	57	do.....	12 1/2	.13	62	Do.
2-inch.....	174	.16	57	do.....	12 1/2	.195	62	Do.
2 1/2-inch.....	153	.20	57	do.....	12 1/2	.245	62	Do.
Couplings, R. & L., malleable iron, black, beaded, per pound:								
1-inch.....	5 1/2	.13	241	do.....	None.			
1 1/2-inch.....	None.			do.....	do.			
2-inch.....	do.			do.....	do.			
2 1/2-inch.....	do.			do.....	do.			
3-inch.....	do.			do.....	do.			
Couplings, R. & L., malleable iron, galvanized, beaded, per pound:								
1-inch.....	do.	.224	57	Chicago.....	None.			
1 1/2-inch.....	do.	.224	57	do.....	do.			
2-inch.....	17	.224	57	do.....	do.			
2 1/2-inch.....	24	.224	57	do.....	do.			
3-inch.....	18	.16	57	do.....	do.			
1 1/2-inch.....	18 1/2	.16	241	do.....	do.			
2-inch.....	12 1/2	.16	241	do.....	do.			
2 1/2-inch.....	12	.16	57	do.....	do.			
Crosses, malleable iron, black, beaded, per pound:								
1-inch.....	2	.16	57	do.....	do.			
1 1/2-inch.....	None.			do.....	do.			
2-inch.....	do.			do.....	5 1/2	.195	62	Do.
2 1/2-inch.....	do.			do.....	10 1/2	.195	62	Do.
3-inch.....	do.			do.....	8 1/2	.195	62	Do.
1 1/2-inch.....	do.			do.....	None.			
2-inch.....	do.			do.....	do.			
2 1/2-inch.....	do.			do.....	do.			

[illegible]**Only.**

<sup>3</sup> A additional orders under 25 per cent clause of contract at contractor's option.

**Plain.**



### PIPE FITTINGS—Continued.

Article.	Bids opened in St. Louis May 7, 1918.			Bids opened in San Francisco June 10, 1918.				
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Elbows, R. & L., malleable iron, galvanized, beaded, per pound—Continued.								
1-inch.	36.	\$0.224	57	Chicago.	None.			
1 1/2-inch.	29.	.16	57	do.	do.			
2-inch.	None.			do.	do.			
Elbows, malleable iron, black, side outlet, beaded, per pound:								
1-inch.	11.	.13	241	Chicago.	do.			
1 1/2-inch.	51.		241	do.	do.			
2-inch.	13.		241	do.	do.			
3-inch.	10.	.13	241	do.	20 1/2.	\$ .155	62	San Francisco.
4-inch.	10.	.13	241	do.	10 1/2.	.155	62	Do.
5-inch.	None.			do.	None.			
1-inch.	None.			do.	do.			
1 1/2-inch.	13.	.13	241	do.	do.			
2-inch.	13.	.13	241	do.	do.			
3-inch.	13.	.13	241	do.	do.			
4-inch.	51.	.23	241	do.	None.			
5-inch.	5.	.224	57	do.	do.			
6-inch.	None.			do.	do.			
7-inch.	do.			do.	do.			
8-inch.	do.			do.	2 1/2.	218	24	San Francisco.
10-inch.	do.			do.	None.			
12-inch.	do.			do.	do.			
Gas service cocks, brass, female:								
1-inch.	11.	.26	241	Chicago.	do.			
1 1/2-inch.	41.	.30	241	do.	do.			
2-inch.	41.	.40	241	do.	do.			
3-inch.	71.	.45	241	do.	3.	do.		
4-inch.	31.	.66	241	do.	None.			
5-inch.	None.			do.	do.			
Gas service cocks, wrought iron, black:								
1-inch.	88.	.01	57	do.	65 1/2.	.0175	124	San Francisco.
1 1/2-inch.	140.	.01	57	do.	do.	.0175	124	Do.
2-inch.	108.	.0153	241	do.	193 1/2.	.022	124	Do.
3-inch.	174.	.0185	241	do.	187 1/2.	.021	124	Do.
4-inch.	161.	.0246	241	do.	do.	.033	124	Do.
5-inch.	82.	.033	241	do.	48 1/2.	.041	124	Do.

14 by 1 1/2 inches.	62	.038	241	do	18 1/2	.0575	124	Do.
2 by 2 inches.	52	.0539	211	do	18 1/2	.08	124	Do.
Nipples, close wrought iron, galvanized:								
1 1/2 by 1 inch.	110	.0197	241	do	8 1/2	.023	124	Do.
1 1/2 by 1 1/4 inches.	107	.0197	241	do	14 1/2	.023	124	Do.
1 1/2 by 1 1/2 inches.	457	.0197	241	do	18 1/2	.023	124	Do.
1 1/2 by 1 3/4 inches.	72	.0237	241	do	21 1/2	.0375	124	Do.
1 1/2 by 2 inches.	567	.0253	241	do	10 1/2	.0325	124	Do.
1 1/2 by 2 1/4 inches.	376	.0540	241	do	11 1/2	.08	124	Do.
1 1/2 by 2 1/2 inches.	191	.0674	241	do	13 1/2	.094	124	Do.
2 by 2 inches.	198	.0896	241	do	110	.127	124	Do.
Nipples short, wrought iron, black:								
1 1/2 by 1 inches.	78	.01	57	do	4 1/2	.0175	124	Do.
1 1/2 by 1 1/4 inches.	102	.01	57	do	4 1/2	.0175	124	Do.
1 1/2 by 1 1/2 inches.	139	.0133	241	do	35 1/2	.022	124	Do.
1 1/2 by 2 inches.	160	.0185	241	do	67 1/2	.02	124	Do.
1 1/2 by 2 1/4 inches.	120	.0246	241	do	6 1/2	.035	124	Do.
1 1/2 by 2 1/2 inches.	60	.093	241	do	None			
1 1/2 by 2 3/4 inches.	64	.079	241	do	do			
2 by 2 inches.	52	.0530	241	do	do			
Nipples short, wrought iron, galvanized:								
1 1/2 by 1 inches.	37	.0197	241	do	6 1/2	.023	124	Do.
1 1/2 by 1 1/4 inches.	64	.0197	241	do	107 1/2	.023	124	Do.
1 1/2 by 1 1/2 inches.	256	.0197	241	do	18 1/2	.0375	124	Do.
1 1/2 by 2 inches.	418	.0257	241	do	12 1/2	.0525	124	Do.
1 1/2 by 2 1/4 inches.	202	.0353	241	do	6 1/2	.08	124	Do.
1 1/2 by 2 1/2 inches.	101	.0546	241	do	6 1/2	.094	124	Do.
1 1/2 by 2 3/4 inches.	63	.074	241	do	72 1/2	.127	124	Do.
2 by 2 inches.	75	.0866	241	do	do			
Nipples long, wrought iron, black:								
1 1/2 by 3 inches.	22	.0185	241	do	10 1/2	.023	124	Do.
1 1/2 by 3 1/4 inches.	16	.0185	241	do	None			
1 1/2 by 3 1/2 inches.	28	.0215	241	do	31 1/2	.031	124	Do.
1 1/2 by 3 3/4 inches.	52	.027	241	do	31 1/2	.04	124	Do.
1 1/2 by 4 inches.	40	.039	241	do	6 1/2	.0375	124	Do.
1 1/2 by 4 1/4 inches.	34	.031	241	do	6 1/2	.075	124	Do.
1 1/2 by 4 1/2 inches.	10	.050	241	do	6 1/2	.088	124	Do.
2 by 4 inches.	10	.088	241	do	6 1/2	.119	124	Do.
Nipples long, wrought iron, galvanized:								
1 1/2 by 3 inches.	20	.0361	241	do	None			
1 1/2 by 3 1/4 inches.	36	.0361	241	do	15 1/2	.032	124	Do.
1 1/2 by 3 1/2 inches.	279	.0361	241	do	18 1/2	.066	124	Do.
1 1/2 by 3 3/4 inches.	357	.0151	241	do	56 1/2	.09	124	Do.
1 1/2 by 4 inches.	229	.060	241	do	46 1/2	.134	124	Do.
1 1/2 by 4 1/4 inches.	188	.0361	241	do	24 1/2	.165	124	Do.
1 1/2 by 4 1/2 inches.	138	.1122	241	do	52 1/2	.221	124	Do.
2 by 4 inches.	13	.1537	241	do	do			

\* Plain.

\* Additional orders under 25 per cent clause of contract at contractor's option.

Only.

## PIPE FITTINGS—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of con- tractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of con- tractor.	Point of delivery.
Pipe, steel, black, per foot:								
1-inch.....	804 feet 1	\$0.034	241	Youngstown, Ohio, in car lots.	None.....			
		.035	241	F. o. b. Chicago.....				
		.034	241	Youngstown, Ohio, in car lots.				
1-inch.....	964 feet 1	.035	241	F. o. b. Chicago.....	do.....			
		.044	241	Youngstown, Ohio, in car lots.				
1-inch.....	1,508 feet 1	.045	241	F. o. b. Chicago.....	do.....			
		.038	241	Youngstown, Ohio, in car lots.				
1-inch.....	1,760 feet 1	.058	241	Youngstown, Ohio, in car lots.	do.....			
		.0825	241	F. o. b. Chicago.....				
1-inch.....	2,180 feet 1	.0845	241	Youngstown, Ohio, in car lots.	do.....			
		.112	241	F. o. b. Chicago.....				
1-inch.....	900 feet 1	.1148	241	Youngstown, Ohio, in car lots.	do.....			
		.134	241	F. o. b. Chicago.....				
1-inch.....	474 feet 1	.1374	241	Ohio, in carload lots.	do.....			
		.18	241	F. o. b. Chicago.....				
2-inch.....	749 feet 1	.1845	241	Ohio, in carload lots.	do.....			
			241	F. o. b. Chicago.....				
Pipe, steel, galvanized, per foot:								
1-inch.....	504 feet 1	.049	241	Youngstown, Ohio, in carload lots.	do.....			
		.0502	241	F. o. b. Chicago.....				
1-inch.....	579 feet 1	.0502	241	Ohio, in carload lots.	do.....			
		.056	241	F. o. b. Chicago.....				
1-inch.....	4,454 feet 1	.0574	241	Ohio, in carload lots.	do.....			
		.071	241	F. o. b. Chicago.....				
1-inch.....	6,089 feet 1	.0728	241	Ohio, in carload lots.	do.....			
			241	F. o. b. Chicago.....				

[illegible]

Extra for wrapping, 30 cents per bundle.

Only.

## PIPE FITTINGS—Continued.

Article.	Bids opened in St. Louis May 7, 1913.			Bids opened in San Francisco June 19, 1913.		
	Quantity awarded.	Unit price.	No. of contractors.	Point of delivery.	Quantity awarded.	Unit price.
Reducers, malleable iron, galvanized, beaded, per pound:						
by 1/2 inch	90	\$0.224	57	Chicago	None	
by 3/4 inch	137	do	57	do	6	\$0.35
by 1 inch	224	do	57	do	9	do
by 1 1/4 inch	296	do	57	do	9	do
by 1 1/2 inch	244	do	241	do	74	do
by 1 3/4 inch	182	do	57	do	22	do
by 2 inches	138	do	57	do	23	do
by 2 1/4 inches	92	do	57	do	16	do
Stopcocks, brass, steam:						
1/2-inch	63	.48	177	Decatur, Ill.	6	.50
3/4-inch	6	.89	204	Cincinnati, Ohio	6	.75
1-inch	49	.70	177	Decatur, Ill.	3	do
1 1/4-inch	39	.95	177	do	15	do
1 1/2-inch	151	1.50	241	Chicago	12	do
1 3/4-inch	161	2.16	241	do	5	1.43
2-inch	61	3.26	241	do	5	1.94
Straps, tinned, for 1/2, 1, 1 1/4, and 2 inch pipe, per pound:	23 dozen	.094	241	do	7 dozen	.13
Tees, malleable iron, black, beaded, per pound:						
1-inch	65	.12	241	do	251	.235
1 1/4-inch	74	.12	241	do	43	.124
1 1/2-inch	79	.12	241	do	84	.124
1 3/4-inch	119	.10	241	do	56	.124
2-inch	102	.10	241	do	24	.166
1 1/2-inch	76	.10	241	do	84	.142
1 3/4-inch	63	.10	241	do	74	.142
2-inch	49	.10	241	do	74	.142
Tees, malleable iron, galvanized, beaded, per pound:						
1-inch	54	.224	57	do	191	.31
1 1/4-inch	89	.224	57	do	31	.31
1 1/2-inch	838	.224	57	do	198	.31
1 3/4-inch	383	.16	241	do	207	.235
2-inch	240	.16	57	do	107	.235
1 1/2-inch	241	.16	57	do	64	.235
1 3/4-inch	102	.16	241	do	36	.235
2-inch	114	.16	57	do	36	.235

[illegible]

\* Additional orders under 25 per cent clause of contract at contractor's option.

**2. Plaintiff.**

Only.

## PIPE FITTINGS—Continued.

Article.	Bids opened in St. Louis May 7, 1918.				Bids opened in San Francisco June 19, 1918.			
	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Valves, angle, 150 pounds working steam pressure, 250 pounds working water pressure:								
1-inch.	17.	\$0.741	57	Chicago.	13.	\$0.84	9	San Francisco.
1 1/2-inch.	17.	.855	57	do.	1.	1.08	9	Do.
2-inch.	40.	1.083	57	do.	21.	1.38	9	Do.
3-inch.	48.	1.426	57	do.	32.	1.75	9	Do.
4-inch.	19.	1.995	57	do.	12.	2.40	9	Do.
6-inch.	13.	2.85	57	do.	12.	3.28	204	Cincinnati, Ohio.
8-inch.	6.	3.90	57	do.	7.	4.36	204	Do.
10-inch.	6.	6.27	57	do.	None.			
12-inch.	1.	11.26	57	do.	do.			
14-inch.	None.	14.70	57	do.	do.			
Valves, gate, 125 pounds working steam pressure, 175 pounds working water pressure:								
1-inch.	16.	.7813	57	do.	None.			
1 1/2-inch.	16.	.8613	57	do.	37.	1.80	9	San Francisco.
2-inch.	96.	1.0763	57	do.	None.			
3-inch.	163.	1.47	57	do.	do.			
4-inch.	61.	1.9425	57	do.	do.			
6-inch.	24.	2.626	57	do.	do.			
8-inch.	23.	3.8225	57	do.	do.			
10-inch.	17.	5.76	57	do.	do.			
12-inch.	1.	7.00	57	do.	do.			
14-inch.	3.			do.	do.			
Valves, cross, 150 pounds working steam pressure, 250 pounds working water pressure:								
1-inch.	None.				4.	1.14	204	Cincinnati, Ohio.
1 1/2-inch.	do.				None.			Do.
2-inch.	do.				4.	1.19	204	Do.
3-inch.	16.	1.996	57	Chicago.	4.	2.28	204	Do.
4-inch.	None.				None.			Do.
6-inch.	do.				do.	3.90	204	Do.
8-inch.	1.	5.13	57	Chicago.	1.	6.46	204	Do.
10-inch.	None.				do.	8.29	204	Do.
12-inch.	do.				None.	10.66	204	Do.
14-inch.	do.				do.	14.38	204	Do.
Valves, radiator, 125 pounds working steam pressure, 175 pounds working water pressure:								
1-inch.	3.	1.7955	57	Chicago.	do.			
1 1/2-inch.	do.	2.23	57	do.	do.			

HOSE GOODS.

1-inch.....	14.....	2,679.....	57.....	do.....	do.....	do.....	do.....	do.....	do.....
1½-inch.....	36.....	2,525.....	57.....	do.....	do.....	do.....	do.....	do.....	do.....
1½-inch.....	12.....	4,645.....	57.....	do.....	do.....	do.....	do.....	do.....	do.....
2-inch.....	None.....	7.41.....	57.....	do.....	do.....	do.....	do.....	do.....	do.....
Couplings, hose, cast brass:									
1-inch.....	173 1.....	\$0.1325.....	121.....	Chicago.....	172.....	80.17.....	9.....	San Francisco.....	De.....
1-inch.....	30.....	.22.....	100.....	St. Louis.....	12.....	.2925.....	100.....	De.....	De.....
1-inch.....	11.....	.51.....	121.....	Chicago.....	None.....	.....	.....	.....	.....
1-inch.....	11.....	.72.....	121.....	do.....	do.....	.....	.....	.....	.....
2-inch.....	None.....	.....	.....	do.....	do.....	.....	.....	.....	.....
2-inch.....	do.....	.....	.....	do.....	do.....	.....	.....	.....	.....
Hose clamps, brass, per dozen:									
For 1-inch hose.....	29 dozen 1.....	.33.....	121.....	Chicago.....	28 dozen.....	.43.....	9.....	De.....	De.....
For 1-inch hose.....	None.....	.....	.....	do.....	do.....	.....	.....	De.....	De.....
For 1½-inch hose.....	1 dozen 1.....	1.37.....	121.....	do.....	None.....	1.40.....	9.....	.....	.....
For 1½-inch hose.....	do.....	1.65.....	121.....	do.....	do.....	.....	.....	.....	.....
For 2-inch hose.....	do.....	2.20.....	121.....	do.....	do.....	.....	.....	.....	.....
For 2-inch hose.....	do.....	3.85.....	121.....	do.....	1 dozen 1.....	3.24.....	100.....	De.....	De.....
For 2-inch hose.....	do.....	.....	.....	do.....	1½ dozen 1.....	8.35.....	100.....	De.....	De.....
Hose, rubber, garden, ½-inch, in lengths of 50 feet coupled, foot coupled, rubber-lined, in lengths of 50 feet, coupled:	9,650 feet.....	.11.....	73.....	St. Louis.....	7,500 feet.....	.006.....	21.....	De.....	De.....
Hose, cotton, rubber-lined, in lengths of 50 feet, coupled:	100 feet.....	.13.....	73.....	do.....	550 feet.....	.17.....	73.....	De.....	De.....
1-inch.....	None.....	.22.....	73.....	do.....	50 feet.....	.26.....	73.....	De.....	De.....
1-inch.....	do.....	.24.....	73.....	do.....	200 feet.....	.29.....	73.....	De.....	De.....
1-inch.....	do.....	.305.....	73.....	do.....	400 feet.....	.33.....	73.....	De.....	De.....
2-inch.....	1,900 feet.....	.65.....	73.....	do.....	800 feet 1.....	.64.....	99.....	De.....	De.....
2-inch, double jacket.....	1,600 feet.....	.....	.....	do.....	.....	.....	.....	.....	.....
Hose, unlined, linen, fire, in lengths of 50 feet, coupled:	None.....	.....	.....	do.....	.....	.....	.....	.....	.....
1-inch.....	do.....	.....	.....	do.....	None.....	.....	.....	.....	.....
1-inch.....	do.....	.....	.....	do.....	do.....	.....	.....	.....	.....
1-inch.....	do.....	.....	.....	do.....	do.....	.....	.....	.....	.....
2-inch.....	do.....	.....	.....	do.....	do.....	.....	.....	.....	.....
2-inch.....	61.....	.369.....	241.....	St. Louis.....	44.....	.40.....	9.....	De.....	De.....
Nozzles hose screw, combination, ½-inch.									
Nozzles hose, screw:	10 1.....	.50.....	241.....	do.....	8 1.....	.65.....	99.....	De.....	De.....
1-inch.....	None.....	.....	.....	do.....	None.....	.....	.....	.....	.....
1-inch.....	7 1.....	1.55.....	241.....	St. Louis.....	do.....	.....	.....	.....	.....
2-inch.....	10 1.....	2.30.....	241.....	do.....	do.....	.....	.....	.....	.....
2-inch.....	6 1.....	4.96.....	241.....	do.....	do.....	.....	.....	.....	.....

1 Only.



## MEDICAL SUPPLIES.

[Bids opened in St. Louis, May 18, 1918.]

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Acids:</b>				
Acetic, U. S. P., in bottles containing 4 ounces.	None.....	.....	.....	
Boric, U. S. P., in cartons containing 4 ounces.	3,380 cartons <sup>1</sup> ...	\$0.043	160	New York.
Hydrochloric, U. S. P., in g. s. bottles containing 1 pound.	146 bottles.....	.36	163	St. Louis.
Nitric, U. S. P., in g. s. bottles containing 8 ounces.	72 bottles.....	.28	163	Do.
Salicylic, U. S. P., in bottles containing 8 ounces.	36 bottles.....	.45	107	Do.
Sulphuric, commercial, for fire extinguishers, in 1-quart bottles.	476 bottles <sup>1</sup> .....	.25	122	Do.
Tannic, U. S. P., in cartons containing 4 ounces.	90 cartons.....	.35	163	Do.
<b>Fluid extracts, U. S. P.:</b>				
Cascara sagrada, U. S. P., in bottles containing 16 ounces.	429 bottles.....	.435	221	Chicago.
Ergot, U. S. P., in bottles containing 4 ounces.	304 bottles.....	.45	194	St. Louis.
Glycyrrhiza, U. S. P., in bottles containing 16 ounces.	320 bottles.....	.65	194	Do.
Ipecac, U. S. P., in bottles containing 4 ounces.	118 bottles.....	.95	194	Do.
Senna, U. S. P., in bottles containing 4 ounces.	129 bottles.....	.2275	167	Do.
<b>Hypodermic tablets:</b>				
Adrenalin and novocaine, in bottles of 10 (adrenalin $\frac{1}{10}$ grain, novocaine 4 grains).	223 bottles.....	.65	194	Do.
Apomorphine, hydrochlorate, U. S. P., $\frac{1}{10}$ grain, in tubes of 25.	67 tubes.....	.30	194	Do.
Atropine, sulphate, U. S. P., $\frac{1}{10}$ grain, in tubes of 25.	165 tubes.....	.07	194	Do.
Cocaine, hydrochlorate, U. S. P., $\frac{1}{10}$ grain, in tubes of 25.	220 tubes.....	.15	194	Do.
Emetine hydrochloride, U. S. P., $\frac{1}{10}$ grain, in tubes of 25.	91 tubes.....	.72	194	Do.
Morphine, U. S. P., $\frac{1}{10}$ grain, atropine, $\frac{1}{10}$ grain, in tubes of 25.	474 tubes.....	.26	194	Do.
Morphine sulphate, U. S. P., $\frac{1}{10}$ grain each, in tubes of 25.	496 tubes.....	.15	194	Do.
Nitroglycerin, U. S. P., $\frac{1}{10}$ grain, in tubes of 25.	149 tubes.....	.05	194	Do.
Pilocarpine, hydrochloride, U. S. P., $\frac{1}{10}$ grain, in tubes of 25.	43 tubes.....	.25	194	Do.
Strychnine, sulphate, U. S. P., $\frac{1}{10}$ grain, in tubes of 25.	353 tubes.....	.04	194	Do.
<b>Tablet triturates:</b>				
Aloin, U. S. P., $\frac{1}{10}$ grain, in bottles of 100.	40 bottles.....	.06	102	Louisville, Ky.
Atropine, sulphate, U. S. P., $\frac{1}{10}$ grain, in bottles of 100.	95 bottles.....	.13	194	St. Louis.
Caffeine, elctrated, U. S. P., $\frac{1}{10}$ grain, in bottles of 100.	183 bottles.....	.12	194	Do.
Calomel and sodium, U. S. P. (calomel $\frac{1}{10}$ grain, sodium bicarbonate 1 grain), in bottles of 500.	479 bottles.....	.12	97	Glens Falls, N. Y.
Calomel and sodium, U. S. P. (calomel $\frac{1}{10}$ grain, sodium bicarbonate 1 grain), in bottles of 500.	466 bottles.....	.15	194	St. Louis.
Cascara sagrada, U. S. P., powdered extract, 1 grain, in bottles of 100.	409 bottles.....	.06	17	Chicago.
Codeine, U. S. P., without sugar, $\frac{1}{10}$ grain, in bottles of 100.	280 bottles <sup>2</sup> .....	.30	215	St. Louis.
Codeine, U. S. P., without sugar, $\frac{1}{10}$ grain, in bottles of 100.	307 bottles <sup>2</sup> .....	.58	215	Do.
Corrosive mercuric chloride, U. S. P., $\frac{1}{10}$ grain, in bottles of 100.	53 bottles.....	.05	102	Louisville, Ky.
Podophyllin, resin of, U. S. P., $\frac{1}{10}$ grain, in bottles of 100.	104 bottles.....	.07	17	Chicago.
Santonine and calomel (santonine $\frac{1}{10}$ grain, calomel $\frac{1}{10}$ grain), in bottles of 100.	150 bottles.....	.40	194	St. Louis.
Strychnine, sulphate, $\frac{1}{10}$ grain, in bottles of 500.	215 bottles.....	.14	194	Do.
Tartar emetic, U. S. P., $\frac{1}{10}$ grain, in bottles of 100.	46 bottles.....	.06	102	Louisville.
Terpinhydrate, U. S. P., 4 grains, heroin, $\frac{1}{10}$ grain, in bottles of 500.	296 bottles.....	.65	17	Chicago.

<sup>1</sup> Additional orders under 25 per cent clause of contract at contractor's option.<sup>2</sup> Only.

## MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Compressed tablets:</b>				
Acetanilid, U. S. P., 2½-grain, in bottles of 100.	997 bottles.....	\$0.07	17	Chicago.
Acetphenetidin, U. S. P., 2½ grains, in bottles of 100.	156 bottles.....	.25	102	Louisville.
Acetylsalicylic acid, N. N. R. (or aspirin), 3 grains, in bottles of 100.	2,383 bottles.....	.178	221	Chicago.
Corrosive mercuric chloride, blue, for external use, in bottles of 26.	463 bottles <sup>1</sup> .....	.11	122	St. Louis.
Same as above, in bottles of 500.....	155 bottles <sup>1</sup> .....	1.15	122	Do.
Hexamethylenamine, U. S. P., 5 grains, in bottles of 500.	234 bottles.....	.44	194	Do.
Heroin, hydrochloride, N. N. R., ¼ grain, in bottles of 100.	221 bottles <sup>2</sup> .....	.30	215	Do.
Phenolphthalein, U. S. P., 1 grain, in bottles of 500.	None.....	.....	.....	.....
Phenolphthalein, U. S. P., 3 grains, in bottles of 500.	None.....	.....	.....	.....
Phenyl salicylate, U. S. P. (salol), 5 grain, in bottles of 100 capsules.	300 bottles.....	.20	194	Do.
Quinine, sulphate, U. S. P., 3 grains, in bottles of 100.	781 bottles.....	.52	194	Do.
Sodium chloride, U. S. P., for normal salt solution (16½ grains pure sodium chloride).	147 bottles.....	.68	17	Chicago.
Sodium salicylate, U. S. P., 5 grains, in bottles of 500.	350 bottles.....	.545	221	Do.
Sulphonethymethanum (trional), U. S. P., 5 grains, in bottles of 100.	113 bottles.....	1.69	167	St. Louis.
	185 bottles.....	1.45	183	Norwich, New York, or Chicago.
Thyroid glands, dried, U. S. P., 2 grains, in bottles of 100.	194 bottles.....	.12	194	St. Louis.
Tannalbin, N. N. R. (albumen tannate), 5 grains, in bottles of 100.	None.....	.....	.....	.....
Trinitrophenol, U. S. P. (picric acid), in bottles containing 4 ounces.	None.....	.....	.....	.....
Veronal, N. N. R., 5 grains, in bottles of 100.	None.....	.....	.....	.....
Aromatic elixir, U. S. P., in bottles containing 16 ounces.	1,472 bottles.....	.24	221	Chicago.
<b>Oils:</b>				
Camphorated oil (3 grains camphor in pure olive oil) in boxes of 1 dozen 2-c. o. ampoules.	168 boxes.....	.45	17	Do.
Castor, U. S. P., cold-pressed, in bottles containing 4 ounces.	6,984 bottles <sup>1</sup> .....	.14	122	St. Louis.
Castor, U. S. P., cold-pressed, in bottles containing 32 ounces.	1,204 bottles <sup>2</sup> .....	.90	19	New York.
Cloves, U. S. P., in bottles containing 2 ounces.	349 bottles.....	.515	167	St. Louis.
Cod-liver, emulsion of, simple, U. S. P., in bottles containing 16 ounces.	1,963 bottles <sup>1</sup> .....	.44	122	Do.
Cod-liver, U. S. P., in bottles containing 16 ounces.	1,284 bottles.....	.575	167	Do.
Cottonseed, refined, in bottles containing 16 ounces.	935 bottles.....	.34875	167	Do.
Croton, U. S. P., in bottles containing 1 ounce.	23 bottles.....	.15	68	San Francisco.
Eucalyptus, U. S. P., in bottles containing 1 ounce.	366 bottles.....	.09	167	St. Louis.
Linseed, U. S. P., raw, in bottles containing 16 ounces.	343 bottles.....	.32	167	Do.
	343 bottles.....	.32	17	Chicago.
Methylsalicylate, U. S. P., in bottles containing 1 ounce.	1,220 bottles.....	.075	107	St. Louis.
Oil of theobroma, U. S. P. (cocoa butter) in ½-pound cakes.	155 cakes.....	.20	167	Do.
Peppermint, U. S. P., in bottles containing 4 ounces.	148 bottles <sup>1</sup> .....	.95	122	Do.
Santal, U. S. P., 5 minims, in boxes containing 24 capsules.	74 boxes.....	.55	170	Do.
Turpentine, U. S. P., in bottles containing 32 ounces.	1,220 bottles.....	.28	141	Do.
<b>Pills, or sugar or chocolate-coated tablets:</b>				
Aloin (¼ grain), belladonna (½ grain), strychnine (⅛ grain), N. F., in bottles of 500.	345 bottles.....	.07	221	Chicago.
Camphor and opium N. F. (camphor, 2 grains; opium, 1 grain), in bottles of 100.	147 bottles.....	.25	194	St. Louis.
Cathartic, vegetable, U. S. P., in bottles of 500.	428 bottles.....	.40	194	Do.

<sup>1</sup> Additional order under 25 per cent clause of contract at contractor's option.<sup>2</sup> Only

## MEDICAL SUPPLIES—Continued

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Pills, or sugar or chocolate-coated tablets—Continued.</b>				
Compound cathartic, U. S. P., in bottles of 500.	585 bottles.....	\$0.50	194	St. Louis.
Iron carbonate, U. S. P., in bottles of 100.	357 bottles.....	.08	221	Chicago.
Yellow mercurous iodide, U. S. P., $\frac{1}{2}$ grain each, in bottles of 100.	506 bottles.....	.068	97	Glens Falls, N. Y.
<b>Tinctures:</b>				
Aconite, U. S. P., in bottles containing 8 ounces.	18 bottles.....	.335	221	Chicago.
Belladonna leaves, U. S. P., in bottles containing 4 ounces.	111 bottles.....	.2175	221	Do.
Benzoin, compound, in bottles containing 8 ounces.	120 bottles <sup>1</sup> .....	.38	122	St. Louis.
Capsicum, U. S. P., in bottles containing 4 ounces.	94 bottles.....	.26	167	Do.
Cardamon, compound, U. S. P., in bottles containing 16 ounces.	82 bottles <sup>1</sup> .....	.50	122	Do.
Colchicum seed, U. S. P., in bottles containing 4 ounces.	49 bottles.....	.28	183	Chicago, New York, or Norwich.
Digitalis, U. S. P., in bottles containing 4 ounces.	245 bottles.....	.225	167	St. Louis.
Gentian, compound, U. S. P., in bottles containing 16 ounces.	270 bottles.....	.54	229	Cedar Rapids, Iowa.
Ginger, U. S. P., in bottles containing 8 ounces.	214 bottles.....	.49	229	Do.
Iodine, U. S. P., in g. s. bottles containing 8 ounces.	970 bottles.....	.48	194	St. Louis.
Chloride of iron, U. S. P., in g. s. bottles containing 16 ounces.	83 bottles.....	.29	221	Chicago.
Myrrh, U. S. P., in bottles containing 4 ounces.	51 bottles.....	.285	167	St. Louis.
Nux vomica, U. S. P., in bottles containing 8 ounces.	209 bottles.....	.33	221	Chicago.
Opium, camphorated, U. S. P., in bottles containing 16 ounces.	331 bottles.....	.65	194	St. Louis.
Opium, U. S. P. (laudanum), in bottles containing 16 ounces.	33 bottles <sup>1</sup> .....	3.68	122	Do.
Rhubarb, aromatic, U. S. P., in bottles containing 16 ounces.	77 bottles <sup>1</sup> .....	.45	122	Do.
<b>Miscellaneous:</b>				
Acetanilid, U. S. P., powdered, in cartons containing 4 ounces.	77 cartons.....	.225	162	Do.
Acetphenetidinum, U. S. P., in cartons containing 1 ounce.	19 cartons.....	.26	175	St. Louis, Omaha, Kansas City, St. Paul, San Francisco, Los Angeles, Portland, or Seattle.
Adeps, lanæ, U. S. P., anhydrous, in cans containing 1 pound.	74 cans.....	.64	167	St. Louis.
Alcohol, U. S. P., 190 proof, in bottles containing 32 ounces.	2,139 bottles <sup>1</sup> .....	.34	122	Do.
Alcohol, denatured, in cans containing 1 gallon, cased.	359 gallons <sup>1</sup> .....	1.20	122	Do.
Alum, U. S. P., crystals, in cartons containing $\frac{1}{2}$ pound.	122 cartons.....	.075	167	Do.
Ammonia, aromatic spirits of, U. S. P., in g. s. bottles containing 16 ounces.	256 bottles <sup>1</sup> .....	.70	122	Do.
Ammonia water, U. S. P., in g. s. bottles containing 32 ounces.	908 bottles.....	.41	162	Do.
Ammonium, chloride, U. S. P., in cartons containing 1 pound.	182 cartons.....	.29	162	Do.
Amyl, nitrite, U. S. P., pearls of (5 drops each), in bottles of 25.	135 boxes.....	.38	194	Do.
Argyrol, in bottles containing 1 ounce.....	472 bottles.....	1.35	17	Chicago.
Silver, in bottles containing 1 ounce.....	233 bottles.....	.88	194	St. Louis.
Silver neucleinate, in bottles containing 1 ounce.	83 bottles.....	.50	162	Do.
Protargol, N. N. R., in bottles containing 1 ounce.	102 bottles.....	1.20	17	Chicago.
Atrophine, sulphite, U. S. P., crystals, in bottles containing $\frac{1}{2}$ ounce.	17 bottles.....	4.40	162	St. Louis.
Balsam, Peru, U. S. P., in bottles containing 2 ounces.	256 bottles.....	.67	167	Do.
Betanaphthol, U. S. P., in tins containing 4 ounces.	48 tins.....	.39	162	Do.
Bismuth, subnitrate of, U. S. P., in boxes containing 8 ounces.	221 boxes.....	1.50	107	Do.
Bismuth, subgallate, U. S. P., in cartons containing 4 ounces.	89 cartons.....	.78	107	Do.

Additional orders under 25 per cent; clause of contract at contractor's option.

MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Calcium oxide, powdered, U. S. P., in bottles (size to make 1 gallon lime water), Lilly's or equal.	448 bottles <sup>1</sup> .....	\$0. 11	122	St. Louis.
Calcium lactate, U. S. P., in bottles containing 8 ounces.	58 bottles.....	.88	162	Do.
Camphor, U. S. P., in 1-pound tins.....	None.....			
Chloral, hydrate of, U. S. P., crystals, in g. s. bottles containing 4 ounces.	56 bottles.....	.40	175	St. Louis, Omaha, Kansas City, St. Paul, San Francisco, Los Angeles, Portland, or Seattle.
Chloretone (in lieu of veronal) in 5-grain capsules in bottles of 100.	116 bottles.....	.90	194	St. Louis.
Chloroform, U. S. P., in bottles containing 1 pound, securely corked.	862 bottles.....	.22	162	Do.
Cocaine, hydrochloride, U. S. P., in bottles containing 1 ounce.	161 bottles.....	1.31	162	Do.
Collodion, flexible, U. S. P., in bottles containing 1 ounce.	600 bottles.....	.07	221	Chicago.
Copper, sulphate, U. S. P., in cartons containing 8 ounces.	88 cartons.....	.11	162	St. Louis.
Copper-sulphate pencils.....	None.....			
Cresote, U. S. P., in bottles containing 1 ounce.	306 bottles.....	.15	156	St. Louis or any point east of the Mississippi River.
Dover's powder, U. S. P. (powder of opium compound), in cartons containing 8 ounces.	45 cartons <sup>1</sup> .....	2. 10	122	St. Louis.
Epinephrine, N. N. R. <del>xxx</del> , in bottles containing 1 ounce.	None.....			
Ether: U. S. P., in tins containing 1 pound.....	921 tins.....	.275	162	Do.
Nitrous, in sealed tubes containing sufficient to make 1 pint spirit nitrous ether, U. S. P.	231 tubes.....	.14	162	Do.
Ethylmorphine, hydrochloride, U. S. P. (dionin) in bottles containing 1 ounce.	None.....			
Ergot, aseptic, in boxes of three 1 cubic-centimeter ampuls.	210 boxes.....	.40	170	Do.
Glycerin, U. S. P., in bottles containing 16 ounces.	1,273 bottles.....	.789	229	Cedar Rapids, Iowa.
Gualacol carbonate, U. S. P., in cartons containing 1 ounce.	None.....			
Homatropine, hydrobromide, U. S. P., 1/4 grain, in tubes of 10 tablets.	.....do.....			
Ichthyol, N. N. R., in bottles containing 16 ounces.	.....do.....			
Iodoform, U. S. P., in bottles containing 4 ounces.	80 bottles.....	1. 25	107	St. Louis.
Lead, acetate, U. S. P., granulated, pure, in cartons containing 8 ounces.	77 cartons.....	.16	162	Do.
Magnesia: Carbonate, U. S. P., in packages containing 4 ounces.	157 packages <sup>1</sup> ...	.15	122	Do.
Sulphate, U. S. P. (Epsom salt), in strong paper cartons containing 10 pounds.	599 cartons.....	.55	141	Do.
Same as above, in strong paper cartons or boxes containing 50 pounds.	59 cartons.....	2. 28	167	Do.
Menthol, U. S. P., in bottles containing 1 ounce.	257 bottles.....	.25	17	Chicago.
Mercury, ammoniated, U. S. P., in cartons containing 4 ounces.	148 cartons.....	.575	162	St. Louis.
Mercury with chalk, U. S. P., in cartons containing 4 ounces.	34 cartons.....	.23	162	Do.
Mercury: Mild chloride, U. S. P. (calomel), in cartons containing 4 ounces.	115 cartons <sup>2</sup> .....	.50	237	Any point in United States on orders \$25 or over; less, f. o. b. New York.
Yellow oxide, U. S. P., in bottles containing 1 ounce.	44 bottles.....	.21	162	St. Louis.
Milk, malted, in bottles containing 1 pound.	2,026 bottles.....	.42	128	Chicago.
Ointment, diluted, mercurial, U. S. P. (blue ointment), in jars containing 1 pound, with cover.	247 jars.....	.98	162	St. Louis.
Ointment of yellow mercuric oxide, ophthalmic, in tubes with small opening covered with screw cap, containing 1/4 ounce.	8,505 tubes <sup>1</sup> .....	.039	122	Do.

<sup>1</sup> Additional orders under 25 per cent clause of contract at contractor's option.

<sup>2</sup> Only.

## MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Ointment:</b>				
Copper citrate, N. N. R., in 1-dram collapsible tubes with smooth ends—5 per cent.....	6,061 tubes <sup>1</sup> .....	\$0.04	183	Norwich, New York, or Chicago.
10 per cent.....	6,253 tubes <sup>1</sup> .....	.0425	183	Do.
Zinc oxide, U. S. P., in jars containing 1 pound.....	896 jars.....	.30	17	Chicago.
Oleoresin of male fern, in bottles containing 2 ounces.....	37 bottles.....	.60	17	Do.
Paraldehyde, U. S. P., in bottles containing 4 ounces.....	46 bottles.....	.60	162	St. Louis.
Pancreatin, U. S. P., in 1-ounce bottles.....	126 bottles.....	.15	194	Do.
Pepsin, saccharated, N. F., in bottles containing 4 ounces.....	236 bottles.....	.35	17	Chicago.
Physostigmine, salicylate, U. S. P., in tubes containing 10 grains.....	None.....			
<b>Petrolatum:</b>				
U. S. P., in cans containing 1 pound.....	2,903 cans.....	.15	167	St. Louis.
Liquid, U. S. P., in sealed cans containing 1 pound.....	674 cans.....	.23	194	Do.
<b>Phenol:</b>				
U. S. P., crystals, in bottles containing 1 ounce.....	279 bottles.....	.08	162	Do.
Liquified, U. S. P., in bottles containing 8 ounces.....	409 bottles.....	.325	162	Do.
Pituitrin, in boxes containing six 1 cubic-centimeter ampuls.....	185 boxes <sup>1</sup> .....	.645	183	Norwich, New York, or Chicago.
<b>Potassium:</b>				
Acetate, U. S. P., in bottles containing 8 ounces.....	64 bottles.....	.67	162	St. Louis.
Bitartrate, U. S. P., pure, powdered (cream of tartar), in cartons containing 1 pound.....	77 cartons.....	.68	162	Do.
Chlorate, powdered, U. S. P., in cartons containing 1 pound.....	65 cartons.....	.265	162	Do.
Iodide, U. S. P., in bottles containing 8 ounces.....	209 bottles.....	1.90	162	Do.
Permanganate, U. S. P., in cartons containing 1 pound.....	None.....			
Potassium and sodium tartrate, U. S. P. (Rochelle salt), powdered, in cartons containing 1 pound.....	291 cartons.....	.48	162	Do.
Quinine, sulphate, U. S. P., in cans containing 5 ounces.....	None.....			
Quinine and urea-hydrochloride, U. S. P., 1 per cent, in boxes of six 5 cubic centimeter ampuls.....	.....do.....			
Resorcinol, U. S. P., in bottles containing 1 ounce.....	36 bottles.....	.4225	107	Do.
<b>Silver nitrate:</b>				
Fused, U. S. P., in bottles containing 1 ounce.....	33 bottles.....	.72	162	Do.
U. S. P., in bottles containing 1 ounce.....	64 bottles.....	.67	162	Do.
Sirup of ferrous iodide, U. S. P., in bottles containing 4 ounces.....	1,383 bottles.....	.116	221	Chicago.
Sirup wild cherry, U. S. P., in bottles containing 4 ounces.....	10,919 bottles.....	.0725	221	Do.
<b>Sodium:</b>				
Bicarbonate, U. S. P., in cartons containing 1 pound.....	484 cartons.....	.08	141	St. Louis.
Borate, U. S. P. (borax), in cartons containing 1 pound.....	230 cartons.....	.1325	167	Do.
Bromide, U. S. P., in boxes containing 1 pound.....	117 boxes.....	.67	17	Chicago.
Hydroxide, U. S. P., sticks, in bottles containing 1 ounce.....	58 bottles.....	.08	162	St. Louis.
Phosphate, U. S. P., in bottles containing 4 ounces.....	848 bottles.....	.08	167	Do.
Salicylate, U. S. P., powdered, in cartons containing 8 ounces.....	112 cartons.....	.475	162	Do.
Solution, arsenite of potassa, U. S. P. (Fowler's solution), in bottles containing 8 ounces.....	148 bottles.....	.12	167	Do.
Solution of hydrogen dioxide, U. S. P., in bottles containing 16 ounces.....	1,386 bottles.....	.13	162	Do.
Sulphur, washed, U. S. P., in cartons containing 1 pound.....	293 cartons.....	.10	141	Do.

<sup>1</sup> Only.

MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Suppositories, glycerin, U. S. P., each wrapped in tin foil, in bottles of 12, with paraffined cork.	414 bottles <sup>1</sup> .....	\$0.24	122	St. Louis.
Thymol, U. S. P., in bottles containing 1 ounce.	81 bottles.....	1.04	102	Do.
Tooth powder, in screw-top tin cans containing $\frac{1}{2}$ pound (formula: Precipitated chalk 4 parts, orris root 1 part, pulverized castile soap $\frac{1}{2}$ part, oil wintergreen, q. s.).	2,336 cans.....	.064	229	Cedar Rapids, Iowa.
Zinc:				
Oxide, U. S. P., in cartons containing 8 ounces.	256 cartons.....	.21	182	St. Louis.
Sulphate, U. S. P., in cartons containing 4 ounces.	95 cartons.....	.04	107	Do.
INSTRUMENTS.				
Albuminometers, Esbach's.....	4.....	.55	2	St. Louis
Applicators, wood, for nose and throat, in cartons of 72 dozen.	267 cartons <sup>2</sup> .....	.21	120	Moore, Pa.
Aspirators, small.....	9.....	2.50	2	Do.
Atomizers:				
Hand.....	295.....	.265	100	Do.
Hand (good quality), suitable for oils.....	250.....	.47	100	Do.
Bags:				
Emergency, 8 by 8 by 18 inches, approximately.	26.....	10.75	212	Do.
Obstetrical, all leather, 18 inches long, metal frame, with four 2-ounce, wide-mouth bottles; to have clamp to hold bag open when in use.	6.....	8.00	212	Do.
Bedpans, earthenware, yellow.....	81.....	.75	2	Do.
Douche pans, white enamel.....	44.....	1.10	167	Do.
Binder's boards:				
24 by 12 inches.....	None.....			
4 by 17 inches.....	do.....			
Bongles, flexible, hard, assorted sizes.....	174.....	.05	212	Do.
Breast pumps.....	321 <sup>2</sup> .....	.15	99	Do.
Carrier, for gauze, in packing uterus.....	4.....	.40	212	Do.
Cases, pocket.....	22.....	5.35	212	Do.
Catheters, flexible:				
Hard, assorted sizes.....	204.....	.04	212	Do.
Soft, assorted sizes.....	517 <sup>2</sup> .....	.07	99	Do.
Catheters, irrigating, urethral and bladder:				
Male.....	21.....	.55	212	Do.
Female.....	22.....	.50	212	Do.
Cupping glasses, with bulb, assorted sizes.....	30.....	.33	2	Do.
Curettes:				
Bone.....	8.....	1.00	212	Do.
Uterine, sharp, irrigating, medium size.....	7.....	1.50	2	Do.
Uterine, dull, irrigating, medium size.....	5.....	1.50	2	Do.
Dilators, uterine, Goodell's:				
Large blade.....	None.....			
Small blade.....	do.....			
Directors, grooved.....	14.....	.10	212	Do.
Douche tubes, uterine, glass.....	None.....			
Elevators, periosteal.....	6.....	1.00	212	Do.
Forceps, trachoma:				
Knapp's.....	19.....	1.50	212	Do.
Noyes, oval.....	14.....	1.25	212	Do.
Forceps, hemostatic, screw lock:				
Curved, $\frac{5}{8}$ -inch.....	56.....	.90	2	Do.
Straight, $\frac{5}{8}$ -inch.....	44.....	.85	2	Do.
Forceps:				
Dressing.....	27.....	.38	212	Do.
Tongue.....	7.....	1.50	214	San Francisco or Seattle.
Tissue.....	20.....	.50	214	Do.
Sulphur.....	36.....	.20	212	St. Louis.
Obstetrical.....	None.....			
Vesicarium, uterine.....	6.....	1.75	2	Do.
Inhalers, chloroform, Esmarch's, complete with bottle.	17.....	.75	2	Do.
Knives, operating:				
Large.....	32.....	.75	2	Do.
Medium.....	43.....	.75	2	Do.
Small.....	40.....	.75	2	Do.

<sup>1</sup> Additional orders under 25 per cent clause of contract at contractor's option.

<sup>2</sup> Only.

## MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery
<b>INSTRUMENTS—continued.</b>				
<b>Mirrors:</b>				
Head, 4-inch, with steel spring (folding).....	13.....	\$3.25	116	Anywhere in United States.
Laryngeal, hollow, in sets of three; one mirror in the set to be 1 inch in diameter.	4 sets.....	1.80	116	Do.
<b>Needles:</b>				
Extra, for hypodermic syringes.....	683.....	.03	212	St. Louis.
Surgical, assorted.....	130.....	.75	212	Do.
Needle holders, Richter pattern.....	9.....	3.25	212	Do.
Powder blowers, for larynx.....	16.....	.60	2	Do.
Probes, with eye, 8-inch.....	28.....	.18	212	Do.
Scissors, 4-inch, screw lock:				
Straight.....	83.....	.70	212	Do.
Curved.....	39.....	.95	2	Do.
<b>Speculums:</b>				
For the ear.....	26.....	.75	212	Do.
For the rectum.....	4.....	1.20	212	Do.
For the vagina—				
Graves.....	3.....	1.50	2	Do.
De Vilbiss.....	2.....	1.00	212	Do.
Sphygmomanometer, aneroid.....	13.....	12.00	255	Rochester, N. Y.
Splints, assorted sizes.....	27 dozen <sup>1</sup> .....	.45	122	St. Louis, Mo.
Sponge holders, for throat.....	24.....	.25	212	Do.
Sterilizers, for instruments, dressings, etc., including an alcohol vapor lamp or Bunsen burner.	3.....	27.00	2	Do.
<b>Stethoscope:</b>				
Bowles, with bell attachment.....	19.....	3.95	212	Do.
Binaural, Ford pattern.....	23.....	2.00	2	Do.
Stomach tube and bulb, in substantial case...	26 <sup>1</sup> .....	.70	99	Do.
<b>Syringes:</b>				
Dental, good quality, for local anesthesia, complete.	19.....	1.50	2	Do.
Ear, glass.....	77.....	1.60	2	Do.
Hard rubber, 2-ounce.....	52.....	.57	100	Do.
Hypodermic, Leur pattern, all glass, regular size, 30 minims, in metal case, with 2 needles.	114.....	1.00	212	Do.
Penis, glass, cone point, in cases.....	555.....	.085	167	Do.
Fountain, all rubber, 2-quart, complete, in wooden box.	315 <sup>1</sup> .....	.67	99	Do.
2-quart, enameled metal water holder, with rubber tubing, complete.	118.....	1.40	2	Do.
Rectal, soft-rubber bulb, for infants.....	630 <sup>1</sup> .....	.09	99	Do.
Tenaculums, uterine.....	5.....	.25	212	Do.
<b>Tongue depressors:</b>				
Metal.....	16.....	.25	212	Do.
Wood, one piece.....	2,976.....	.015	92	New York, N. Y.
Tooth-extracting sets, in substantial case.....	None.....			
Tourniquets, field.....	13 <sup>1</sup> .....	.32	99	St. Louis.
Trocars, with canula.....	15.....	1.00	2	Do.
Tubes, rectal, of soft rubber, for high enema, of good quality.	89 <sup>1</sup> .....	.18	99	Do.
Urinometers.....	13.....	.35	2	Do.
Ureometers, Doremus, with pipette.....	5.....	.75	2	Do.
Uterine dressing forceps, Emmet's.....	7.....	1.25	2	Do.
Uterine sounds, Sim's.....	7.....	.35	2	Do.
Wire, for cleaning hypodermic needles, in bundles of 1 dozen.	141.....	.02	214	San Francisco or Seattle.
<b>SURGICAL DRESSINGS, ETC.</b>				
<b>Bags, hot-water:</b>				
Rubber, 2-quart, for hospitals.....	None.....			
Rubber, 2-quart, for field use among Indians.	760.....	.57	100	St. Louis.
Aluminum, 2-quart, for hospitals.....	None.....			
Heavy tin, 2-quart, for hospitals.....	246.....	1.25	2	Do.
<b>Bags, ice:</b>				
Screw-capped, cloth-covered, 9-inch, for hospitals.....	144.....	.34	100	Do.
Screw-capped, cloth-covered, for field use among Indians.	29.....	.41	2	Do.
116.....	.41	2	Do.	
<b>Bandages, gauze:</b>				
2 inches wide, 10 yards long.....	2,580 dozen <sup>1</sup> .....	1.15	122	Do.
3 inches wide, 10 yards long.....	1,957 dozen.....	1.39	2	Do.

<sup>1</sup> Additional orders under 25 per cent clause of contract at contractor's option. <sup>2</sup> Only. <sup>3</sup> Per dozen.

## MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery
<b>SURGICAL DRESSINGS, ETC.—continued.</b>				
Bandages, plaster of Paris:				
1½ inches by 5 yards.....	34 dozen.....	\$1.20	13	Chicago.
2 inches by 5 yards.....	85 dozen.....	1.45	13	Do.
3 inches by 5 yards.....	75 dozen.....	1.80	13	Do.
Bandages, woven, elastic:				
2½ inches by 3 yards, stretched.....	151.....	.42½	2	St. Louis.
2½ inches by 5 yards, stretched.....	167.....	.74½	2	Do.
Bandages, suspensory.....	None.....			
Cotton, absorbent, in cartons containing:				
One-fourth pound (for general use).....	2,142 pounds.....	.52	13	Chicago.
1 pound (for general use).....	3,556 pounds.....	.46	13	Do.
Cotton, surgeon's nonabsorbent, in cartons, containing one-half pound.....	None.....			
Cotton wadding.....	do.....			
Finger cots, rubber, 1 dozen in a box.....	199 boxes.....	.10	214	San Francisco or Seattle.
Gauze, borated, in paper cartons, in 1-yard lengths.....	None.....			
Gauze, iodoform; 1-yard lengths, in glass containers.....	do.....			
Gauze, sterilized, plain, in packages of 25 yards.....	25,391 yards.....	12.10	2	St. Louis.
Gauze, unsterilized, plain, in packages of 25 yards.....	12,502 yards.....	12.00	2	Do.
Ligature:				
Catgut, plain, in glass tubes; one 20-inch strand in each tube; sizes, 0, 1, and 2, as may be required.....	913 tubes.....	.05	124½	United States.
Catgut, 10-day chromicized, in glass tubes; one 20-inch strand in each tube; sizes, 0, 1, and 2, as may be required.....	881 tubes.....	.05	124½	Do.
Umbilical tape, linen, in glass tubes; two 9-inch tapes in each tube.....	None.....			
Silk, wound on cards containing about ½ ounce.....	224 cards.....	.05	212	St. Louis.
Silk worm gut, two sizes, fine and medium, in slides of 25 in case.....	123 cases.....	.38	212	Do.
Silver wire.....	14 ounces.....	1.25	212	Do.
Lint, absorbent, in cartons containing 1 ounce.....	None.....			
Oiled silk, opaque, 30 inches wide:				
In 1-yard rolls.....	141 yards <sup>1</sup> .....	.84	160	New York.
In 5-yard rolls.....	229 yards <sup>1</sup> .....	.77	160	Do.
Pads, Kelly's, obstetrical, with sleeve, about 24 by 44 inches.....	24.....	3.50	100	St. Louis.
Pencils, hair (assorted sizes), in vials.....	None.....			
Plaster:				
Belladonna, 1 yard in a tin.....	451 yards.....	.48	13	Chicago.
Cantharidis, 1 yard in a tin.....	None.....			
Mustard, 4 yards in a tin.....	697 yards.....	.18	13	Do.
Porous.....	701 dozen.....	.58	13	Do.
Zinc oxide, adhesive, surgeon's, on spools, 1 inch wide, 10 yards long.....	894 spools.....	.24	13	Do.
Zinc oxide, adhesive, surgeon's, on spools, 2 inches wide, 10 yards long.....	1,055 spools.....	.40	13	Do.
Zinc oxide, adhesive, surgeon's, on spools, 3 inches wide, 10 yards long.....	856 spools.....	.56	13	Do.
Rubber sheeting:				
Maroon, double-coated, 1½ yards wide, good quality.....	312 yards.....	1.25	100	St. Louis.
White, double-coated, 1½ yards wide, good quality.....	293 yards.....	1.25	100	Do.
Tubes, rubber drainage, Nos. 1, 2, and 3.....	104 yards.....	.36	2	Do.
Tubing, rubber:				
½-inch.....	214 yards.....	.03	100	Do.
¾-inch.....	473 yards.....	.07	100	Do.
<b>DISINFECTANTS.</b>				
Liquor cresolis compound, U. S. P., in bottles containing 16 ounces.....	1,741 bottles <sup>1</sup> .....	.22	122	Do.
Calcium hypochlorite (bleaching powder), in 5-pound containers, noncorrosive metal; shall contain not less than 30 per cent available chlorine (both names to appear on label).....	None.....			
Solution, formaldehyde, 40 per cent solution:				
In bottles containing 32 ounces.....	995 bottles <sup>1</sup> .....	.67	160	New York.
In kegs containing 5 gallons.....	48 kegs <sup>1</sup> .....	11.20	160	Do.
Sulphur, in rolls (large pieces, not crushed).....	None.....			

<sup>1</sup>Per package. Additional quantities under 25 per cent clause of contract at contractor's option.



## MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>HOSPITAL STORES.</b>				
Capsicum, powdered, in bottles containing 1 pound.	27 bottles.....	\$0.48	237	Any point in United States if orders exceed \$25. Smaller orders f. o. b. New York.
Flaxseed meal, in tins containing 5 pounds (crushed seed, not cakes).	914 pounds.....	.15	167	St. Louis.
Gelatin, Silver Label or equal.	None.....			
Ginger, powdered, in cartons containing 1 pound.	45 cartons.....	.24	167	Do.
Soap, for medicinal use, in cakes.	1,928 pounds <sup>1</sup> .....	.27	160	New York.
Soap:				
Castile, white, in cakes.	None.....			
Green, in jars containing 1 pound.	763 pounds.....	.296	246	Do.
<b>MISCELLANEOUS.</b>				
Bags, paper:				
1-pound capacity.....	533 hundred <sup>1</sup> .....	.12	160	Do.
1-pound capacity.....	323 hundred <sup>1</sup> .....	.16	160	Do.
Basins, pus, medium size, enameled ware.	None.....			
Bedbug destroyer, in tin cans containing 16 ounces.	do.....			
Boxes:				
Ointment, impervious.....	1,966 dozen <sup>1</sup> .....	.17	130	Moore, Pa.
Powder.....	1,133 dozen.....	.09 .08 .07 .15	167	St. Louis.
Brushes, nail or hand, good grade, for surgical use.	563.....		2	Do.
Cases, medicine, buggy.	None.....			
Capsules, gelatin, assorted, Nos. 0 to 4 (number of capsules to the box should be specified).	do.....			
Chairs, operating.	do.....			
Cork pressers.	do.....			
Corks, vulvet, best, sizes Nos. 1 to 10 (specify price on each size).	802 gross <sup>1</sup> .....			
If 1 X X.....		.14		
If 2 X X.....		.15		
If 3 X X.....		.18		
If 4 X X.....		.21		
If 5 X X.....		.24		
If 6 X X.....		.26		
If 7 X X.....		.31		
If 8 X X.....		.42		
If 9 X X.....		.50		
If 10 X X.....		.57		
Cups, sputum, paper.	880 hundred.....	.48	92	New York.
Holders, metal, with cover, to hold paper sputum cups.	None.....			
Dispensatory, United States, cloth (latest edition).	3.....	10.80	167	St. Louis.
Droppers, medicine.	19,183.....	.01	214	San Francisco or Seattle.
Envelopes, drug, medium size, by the 100.	None.....			
Formulary, National (latest edition).	6.....	2.50	167	St. Louis.
Funnels, glass, 8-ounce.	29.....	.20	167	Do.
Glasses, colored, riding bow, for the eyes, assorted colors.	2,274 <sup>1</sup> .....	.0825	121	Chicago.
Hones.	19 <sup>1</sup> .....	.15	121	Do.
Labels, blank, prescription, gummed, without any printing:				
1 by 2 inches.....	None.....			
2 by 3 inches.....	do.....			
3 by 4 inches.....	do.....			
Measures, graduated, glass:				
8-ounce.....	24.....	.35	167	St. Louis.
4-ounce.....	28.....	.30	167	Do.
Minim.....	41.....	.28	2	Do.
Medicine glasses, 1-ounce, graduated.	116 dozen.....	.60	2	Do.
Mortars and pestles:				
Wedgewood, 5-inch.....	8.....	.88	167	Do.
Glass, 4-inch.....	18.....	.25	167	Do.
Nipples, for nursing bottles, to fit over neck of bottle.	2,365.....	.02	100	Do.

<sup>1</sup> Additional quantities under 25 per cent clause of contract at contractor's option.

: Only

## MEDICAL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>MISCELLANEOUS—continued.</b>				
<b>Papers:</b>				
Blue and white, 4½ by 6 inches, for saddlelit powder.	None.....			
Filtering, round, gray, 10-inch.....	48 packages.....	\$0.48	167	St. Louis.
Litmus, blue and red, in boxes of 1 dozen books.	61 boxes.....	.15	212	Do.
Papers, powder, 2½ by 3½ inches.....	None.....			
Paper, wrapping.....	do.....			
Percolators, glass, 1-gallon.....	5.....	.50	2	Do.
Pill boxes, paper, in boxes of 1 gross.....	206 gross.....	.84 .96 1.08	167	Do.
Pill tiles, 8-inch, graduated.....	5.....	.975	2	Do.
Saddlebags, medical, convertible.....	1.....	10.75	212	Do.
Scales, baby, spring.....	14.....	.30	212	Do.
Scales and weights, prescription.....	None.....			
Test-type and astigmatic chart (for testing vision), International standard.	18.....	.50	2	Do.
<b>Spatulas:</b>				
3-inch.....	34 1.....	.22	121	Chicago.
6-inch.....	35 1.....	.35	121	Do.
Spirit lamps.....	20.....	.22	2	St. Louis.
Stillis, of moderate price, for making distilled water, 1-gallon size.	4.....	8.50	2	Do.
Tables, operating.....	1.....	32.50	2	Do.
Test tubes, 5-inch.....	45 dozen.....	.105	214	San Francisco or Seattle.
Thermometers, clinical, Fahrenheit, with certificate and case.	2,142.....	.525	2	St. Louis.
Tubes, glass, drinking, assorted sizes.....	17 gross.....	1.20	2	Do.
Twine, wrapping, cotton.....	None.....			
<b>Vials:</b>				
1-ounce.....	1,112 dozen 1.....	.15	135	Do.
1-ounce.....	1,579 dozen 2.....	.16	135	Do.
2-ounce.....	3,062 dozen 2.....	.18	135	Do.
4-ounce.....	2,295 dozen 2.....	.25	135	Do.
6-ounce.....	978 dozen 2.....	.28	135	Do.

## SCHOOLBOOKS, SCHOOL DESKS, ETC.

[Bids opened in Chicago Apr. 15, 1918.]

## SCHOOLBOOKS AND SUPPLIES.

<b>CHARTS.</b>				
The North American Bird and Nature Study Chart.—John C. Montjoy.	None.....			
The Elson-Runkel Reading Chart.....	10.....	\$2.40	1	Chicago.
The Arnett Vocabulary Builder.....	None.....			
Wooster's Industrial Reading Chart.....	do.....			
Johanson's Anatomy and Physiology Chart.....	do.....			
Wooster's Word Cards.....	29 dozen.....	.50	1	Do.
<b>PRIMERS.</b>				
Elson-Runkel Primer.....	778.....	.27	1	Do.
Elson-Runkel Primer, Teacher's Edition.....	14.....	.44	1	Do.
Supplementary equipment for Elson-Runkel books				
I (Primer), 20 outline pictures.....	70 sets.....	.20	1	Do.
II (Primer), 75 letter and phonogram cards.	17 sets.....	.35	1	Do.
III (Primer), 308 words in primer.....	15 sets.....	1.10	1	Do.
Sumner's.....	18.....	.30	1	Do.
Palmer Method Primer.....	164.....	.225	192	Do.
Wooster, Primer, The.....	700.....	.24	1	Do.
Aldine, Spaulding and Bryce.....	442.....	.30	1	Do.
Riverside Primer, Sickie and Seegmiller.....	300.....	.24	129	Riverside Press, Cambridge, Mass.
<b>FOR ADULT BEGINNERS.</b>				
First Book for Non-English Speaking People, Harrington.	149.....	.21	118	Chicago.
Second Book for Non-English Speaking People, Harrington.	10.....	.24	118	Do.
Language Lessons to Accompany First Book, Harrington.	2.....	.21	118	Do.

1 Only.

2 Original standard packages. No printing or repacking.

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>READERS.</b>				
New Education Readers, Book 1, Demarest & Van Sickle.	417.....	\$0.28	4	Chicago.
Perception Cards for Book 1, Demarest & Van Sickle.	14 sets.....	1.60	4	Do.
New Education Readers, Book 2, Demarest & Van Sickle.	328.....	.28	4	Do.
Perception Cards for Book 2, Demarest & Van Sickle.	12 sets.....	.60	4	Do.
New Education Readers, Book 3, Demarest & Van Sickle.	236.....	.32	4	Do.
New Education Readers, Book 4, Demarest & Van Sickle.	138.....	.36	4	Do.
Elson Primary Reader:				
Book 1.....	825.....	.28	1	Do.
Book II.....	813.....	.35	1	Do.
Supplementary equipment for Elson-Runkel Books:				
VI (Book I), 91 letter and phonogram cards.	42 sets.....	.45	1	Do.
VII (Book I), word cards, 240 words.....	44 sets.....	.80	1	Do.
VIII (Book II), 60 letter and phonogram cards.	20 sets.....	.31	1	Do.
Elson Primary Reader:				
Book III.....	646.....	.40	1	Do.
Book IV.....	529.....	.40	1	Do.
Elson Grammar School Reader:				
Book 1.....	327.....	.42	1	Do.
Book 2.....	226.....	.42	1	Do.
Book 3.....	163.....	.50	1	Do.
Book 4.....	94.....	.50	1	Do.
Graded Classics, Haliburton & Norvell:				
First Reader.....	177.....	.25	1	Do.
Second Reader.....	126.....	.29	1	Do.
Third Reader.....	132.....	.34	1	Do.
Fourth Reader.....	73.....	.37	1	Do.
Fifth Reader.....	21.....	.40	1	Do.
Wooster Readers, The:				
First.....	456.....	.23	1	Do.
Second.....	492.....	.27	1	Do.
Third.....	358.....	.32	1	Do.
Fourth.....	85.....	.40	1	Do.
Fifth.....	26.....	.48	1	Do.
Progressive Road to Reading:				
Book 1, Burchill.....	146.....	.29	230	New York.
Book 2, Burchill.....	122.....	.34	230	Do.
Book 3, Introductory, Burchill.....	55.....	.36	230	Do.
Book 3, Burchill.....	25.....	.39	230	Do.
Book 4, Burchill.....	15.....	.44	230	Do.
Riverside Readers, Sickle and Seegmiller:				
First.....	247.....	.28	129	Riverside Press, Cambridge, Mass.
Second.....	238.....	.32	129	Do.
Third.....	307.....	.40	129	Do.
Fourth.....	225.....	.44	129	Do.
Fifth.....	167.....	.44	129	Do.
Sixth.....	113.....	.44	129	Do.
Seventh.....	84.....	.44	129	Do.
Eighth.....	60.....	.48	129	Do.
Aldine Readers, Spaulding & Bryce (Newson & Co.):				
Manual for teachers.....	3.....	.51	20	Chicago, Ill.
First reader.....	297.....	.30	1	Do.
Second reader.....	188.....	.36	1	Do.
Third reader.....	242.....	.43	1	Do.
Fourth reader.....	45.....	.45	20	Do.
Fifth reader.....	40.....	.45	20	Do.
<b>SPELLING.</b>				
New World Speller, Wohlfarth & Rogers:				
Grades 1 and 2.....	501.....	.25	1	Do.
Grades 3, 4, and 5.....	1215.....	.20	1	Do.
Grades 6, 7, and 8.....	672.....	.20	1	Do.
Spelling book, Bailey-Manly:				
Part I.....	64.....	.128	129	Riverside Press Cambridge, Mass.
Part II.....	59.....	.16	129	Do.
Mayne's Slight Speller.....	40.....	.24	1	Chicago, Ill.

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of con- trac- tor.	Point of delivery.
<b>GEOGRAPHY.</b>				
Home Geography, Frye.....	712.....	\$0.29	96	Chicago.
First Step in Geography, Frye.....	332.....	.52	96	Do.
Grammar School Geography, Frye.....	76.....	1.00	96	Do.
New Geographies, Tarr and McMurray:				
First Book.....	448.....	.514	1	Do.
Second book.....	157.....	.88	1	Do.
Elementary Geography, Dodge.....	108.....	.45	1	Do.
Advanced Geography, Dodge.....	18.....	.96	1	Do.
<b>PHYSIOLOGY AND HYGIENE.</b>				
Primer of Hygiene, Ritchie and Caldwell.....	486.....	.40	1	Do.
Primer of Sanitation, fifth and sixth grades, Ritchie.....	108.....	.46	1	Do.
Primer of Physiology, Ritchie.....	782.....	.55	1	Do.
Human Physiology, sixth, seventh, and eighth grades, Ritchie.....	232.....	.79	1	Do.
Human Body and Health, Davison:				
Elementary.....	105.....	.32	4	Do.
Intermediate.....	59.....	.40	4	Do.
Advanced.....	None.....			
Elements of Physiology and Sanitation, Ret- ger.....	2.....	.75	12	New York.
<b>DICTIONARIES, WEBSTER.</b>				
Elementary School Dictionary.....	620.....	.72	4	Chicago, Ill.
Secondary School Dictionary.....	181.....	1.20	4	Do.
New International Dictionary.....	None.....			
<b>AGRICULTURE.</b>				
Beginner's Guide to Fruit Growing, Waugh.....	45.....	.56	272	St. Paul.
Chemistry of Plant and Animal Life, Snyder.....	54.....	1.20	159	New York.
Diseases of Economic Plants, Stevens and Hall.....	73.....	1.60	159	Do.
Feeding of Animals, Jordan.....	30.....	1.40	159	Do.
Field Crops, Wilson and Warburton.....	46.....	1.12	272	St. Paul.
Fruit Harvesting, Storing, and Marketing, Waugh.....	31.....	.70	272	Do.
Insects and Insecticides, Weed.....	51.....	1.05	272	Do.
Farm Management, Warren.....	33.....	1.40	159	New York.
Practical Course in Botany, Andrews.....	178.....	1.00	4	Chicago, Ill.
Physics of the Household, Lynde.....	35.....	1.00	159	New York.
Productive Farming, Davis.....	61.....	.72	151	Chicago, Ill.
Soils and Soil Fertility, Whitson and Walston.....	90.....	.93	272	St. Paul.
School Agriculture, Wood.....	137.....	.67	272	Do.
Types and Breeds of Farm Animals, Plumb.....	30.....	1.60	96	Chicago.
Beginner's Botany, Bailey.....	56.....	.48	159	New York.
Chemistry of Farm and Home, Tottinham and Ince.....	26.....	.93	272	St. Paul.
Chemistry in the Home, Weed.....	2.....	.96	4	Chicago.
<b>LANGUAGE AND GRAMMAR.</b>				
Primary Language Lessons, Serl.....	948.....	.28	4	Do.
Intermediate Language Lessons, Serl.....	579.....	.45	4	Do.
Modern English Grammar and Composition, Buehler.....	469.....	.65	1	Do.
Elements of Business Law, Huffcut.....	65.....	.90	96	Do.
Aldine First Language Book, Spaulding and Bryce.....	66.....	.40	1	Do.
Aldine Language Method Manual for Teachers using First Language Book, Spaulding and Bryce.....	4.....	.50	1	Do.
Aldine Second Language Book, Spaulding and Bryce.....	53.....	.45	1	Do.
Aldine Language Method Manual for Teach- ers using Second Language Book, Spaulding and Bryce.....	2.....	.50	1	Do.
Language Work for the Second Year, O'Shea- Eichman.....	160.....	.24	168	New York.
Composition Book by Grades, O'Shea-Eich- man:				
Third year.....	32.....	.24	168	Do.
Fourth year.....	66.....	.24	168	Do.
Fifth year.....	62.....	.24	168	Do.
Sixth year.....	50.....	.24	168	Do.
Seventh year.....	63.....	.27	168	Do.
Eighth year.....	85.....	.27	168	Do.
The Business Letter, Dwyer.....	3.....	.68	129	Riverside Press, Cam- bridge, Mass.

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>ARITHMETIC.</b>				
Every Day Arithmetic, Hoyt & Peet:				
Book I.....	1,500.....	\$0.32	129	Riverside Press, Cambridge, Mass.
Book II.....	1,015.....	.32	129	Do.
Book III.....	349.....	.36	129	Do.
First Year in Numbers, Hoyt & Peet.....	1,224.....	.28	129	Do.
Agricultural Arithmetic, Shotts & Weir.....	17.....	.60	272	St. Paul, Minn.
Primary Exercises in Arithmetic, Silver:				
No. I.....	256.....	.08	4	Chicago, Ill.
No. II.....	263.....	.08	4	Do.
No. III.....	235.....	.12	4	Do.
Durell's Arithmetic:				
Book 1, Part I.....	311.....	.24	168	New York.
Book 1, Part II.....	347.....	.34	168	Do.
Book 2.....	212.....	.51	168	Do.
Book 3.....	51.....	.54	168	Do.
Farm Arithmetic, Burkett & Swartzell.....	8.....	.74½	1	Chicago, Ill.
Industrial Arithmetic, White & Colgrove.....	10.....	.60	272	St. Paul, Minn.
Industrial Arithmetic, Gardner & Murland (for girls).....	9.....	.45	118	Chicago, Ill.
Rural Arithmetic, A, Madden & Turner.....	22.....	.52	129	Riverside Press, Cambridge, Mass.
Rural Arithmetic, Calfee.....	36.....	.24	96	Chicago, Ill.
Wooster's Number Cards.....	82 dozen.....	.48	1	Do.
Shop Problems in Mathematics, Breckinridge-Mercereau-Moore.....	2.....	.90	96	Do.
Vocational Algebra, Wentworth & Smith.....	32.....	.40	96	Do.
<b>UNITED STATES HISTORY.</b>				
Mace's History Reader:				
Book I.....	487.....	.27½	1	Do.
Book II.....	282.....	.27½	1	Do.
Book III.....	403.....	.27½	1	Do.
Primary History of United States, McMaster.....	189.....	.48	4	Do.
Brief History of United States, McMaster.....	138.....	.80	4	Do.
First Steps in the History of the United States, Mowry.....	56.....	.50	1	Do.
Essentials of United States History, Mowry.....	65.....	.80	230	New York.
Beginner's American History, Montgomery.....	362.....	.48	96	Chicago, Ill.
Elementary American History, Montgomery.....	147.....	.80	96	Do.
Brief History of South Dakota, Robinson.....	1.....	.48	4	Do.
The Story of Our Country, Elson & MacMullan:				
Book 1.....	69.....	.53	1	Do.
Book 2.....	29.....	.56	1	Do.
School History of the United States, McMaster.....	75.....	.80	208	Do.
School History of the United States, McMaster.....	7.....	.80	4	Do.
Leading Facts of American History, Montgomery.....	101.....	.65	196	Topeka, Kans.
	78.....	.80	96	Chicago, Ill.
<b>CIVIL GOVERNMENT.</b>				
Community Civics, Field & Nearing.....	None.....			
Government in the United States, Garner.....	224.....	.80	4	Do.
How the People Rule, Hoxie.....	494.....	.36	230	New York.
First Lessons in Civics, Forman.....	198.....	.48	4	Chicago, Ill.
Essentials in Civil Government, Forman.....	159.....	.48	4	Do.
How We Are Governed, Dawes.....	10.....	.80	96	Do.
Parliamentary Law, Paul.....	13.....	.60	41	New York.
<b>SINGING.</b>				
Carmina for Social Worship, Turner.....	None.....			
Songs of the Nation, Revised, Johnson.....	242.....	.48	230	Do.
Assembly Song Book, Rix.....	218.....	.54	12	Do.
Abridged Academy Song Book, Levermore.....	124.....	.80	96	Chicago, Ill.
Laurel Music Reader, Special Edition, Tomlins.....	3.....	.35	196	Topeka, Kans.
Songs Every One Should Know, Johnson.....	164.....	.40	4	Chicago, Ill.
<b>MUSIC INSTRUCTION.</b>				
Natural Music Course, Ripley & Tapper:				
Harmonic Primer.....	140.....	.24	4	Do.
Harmonic First Reader.....	51.....	.24	4	Do.
Harmonic Second Reader.....	47.....	.28	4	Do.
Harmonic Third Reader.....	46.....	.32	4	Do.
Harmonic Fourth Reader.....	1.....	.32	4	Do.
Harmonic Fifth Reader.....	2.....	.40	4	Do.
Music in the Grades (Manual for Teachers).....	6.....	.12	4	Do.

¹ Only.

SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>MUSIC INSTRUCTION—continued.</b>				
Zuchtman's American Music System:				
Book 1.....	81.....	\$0.32	1	Chicago, Ill.
Book 2.....	51.....	.38	1	Do.
Book 3.....	1.....	.42	1	Do.
Book 4.....	1.....	.42	1	Do.
Teacher's Manual.....	3.....	.79	1	Do.
<b>DRAWING.</b>				
Blackboard Sketching, Whitney.....	42.....	.48	172	New York or Chicago.
Constructive Work for Schools Without Special Equipment, Newell.....	13.....	.95	1	Chicago, Ill.
Drawing paper, 8 by 11, 100 sheets in pack.....	3,278 packages <sup>1</sup> ..	.1676	78	Do.
Mechanical Drawing and Practical Drafting, Sampson.....	24.....	1.20	172	New York or Chicago.
Anthony's Technical Drawing Series:				
Anthony's Mechanical Drawing.....	17 <sup>4</sup> .....	1.28	1	Chicago, Ill.
Daniel's Freehand Lettering.....	22.....	.96	1	Do.
Prang's Progressive Drawing Books:				
Teacher's Outline Book.....	4 dozen.....	2.40	1	Do.
Book 1.....	31 dozen.....	1.44	1	Do.
Book 2.....	13 dozen.....	1.44	1	Do.
Book 3.....	12 dozen.....	1.44	1	Do.
Book 4.....	14 <sup>1</sup> dozen.....	1.80	1	Do.
Book 5.....	12 <sup>1</sup> dozen.....	1.80	1	Do.
Book 6.....	9 <sup>1</sup> dozen.....	1.80	1	Do.
Book 7.....	None.....			
Book 8.....	do.....			
The Prang Elementary Course in Art Instruction:				
Manual for Teachers—				
First year.....	10.....	.75	1	Do.
Second year.....	8.....	.75	1	Do.
Third year.....	6.....	.75	1	Do.
Fourth year.....	1.....	.75	1	Do.
Fifth year.....	2.....	.75	1	Do.
Sixth year.....	1.....	.75	1	Do.
Seventh year.....	None.....			
Eighth year.....	do.....			
Prang's set color box, No. 1 (or equal).....	1,786 <sup>1</sup> .....	7.085	65	Do.
Applied Arts Drawing Books, Seegmiller:				
First year—				
Autumn.....	233.....	.08	1	Do.
Spring.....	197.....	.08	1	Do.
Second year—				
Autumn.....	200.....	.08	1	Do.
Spring.....	212.....	.08	1	Do.
Third year—				
Autumn.....	123.....	.08	1	Do.
Spring.....	141.....	.08	1	Do.
Fourth year—				
Autumn.....	94.....	.08	1	Do.
Spring.....	100.....	.08	1	Do.
Fifth year—				
Autumn.....	46.....	.12	1	Do.
Spring.....	46.....	.12	1	Do.
Sixth year—				
Autumn.....	40.....	.12	1	Do.
Spring.....	40.....	.12	1	Do.
Seventh year—				
Autumn.....	None.....			
Spring.....	do.....			
Eighth year—				
Autumn.....	do.....			
Spring.....	do.....			
<b>PENMANSHIP.</b>				
Birch Sectional Writing Chart, consisting of: 1 metal wall holder, 36 inches long by 84 inches wide; 1 alphabet, caps, comma, period; 1 alphabet, small letters, including dollar and percentage signs and digits; 1 manual of Course of Study for Teachers; 3 large illustration cards, 8 by 18 inches. Extra holders, 36 by 84 inches, metal, for above chart.	11 sets.....	5.20	265	Do.
	11.....	1.50	266	Do.

<sup>1</sup> Only.

<sup>4</sup> "Devoe" set color box No. 22 awarded.

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>PENMANSHIP—continued.</b>				
Extra alphabet, caps, for above chart	None.....			
Extra alphabet, small, including digits, etc., for above chart.	.....do.....			
Extra manuals and set of 3 illustration cards for above chart.	.....do.....			
Steadman's Graded Lessons in Writing, Nos. 1 to 8 (in pads).	134 dozen.....	\$1.43	1	Chicago, Ill.
Steadman's Business Forms (in pads).....	7 dozen.....	1.43	1	Do.
Steadman's Writing Chart (in sets of 5 sheets).	1 set.....	1.20	4	Do.
Writing Lessons for Primary Grades 1 and 2, Palmer.	46 dozen.....	1.20	192	Do.
Palmer's Method of Business Writing, Grades 3 to 8.	65 dozen.....	1.20	1	Do.
		\$1.92	192	Do.
<b>SUPPLEMENTARY AND LIBRARY BOOKS.</b>				
Bow-Wow and Mew-Mew, Craile.....	None.....			
The Cat That Was Lonesome, Chadwick-Freeman.	.....do.....			
The Woman and Her Pig, Chadwick-Freeman	.....do.....			
The Mouse That Lost Her Tail, Chadwick-Freeman.	.....do.....			
Dramatic First Reader, Cyr.....	34.....	.24	96	Do.
Short Stories for Little Folks, Bryce.....	32.....	.30	1	Do.
Mother Goose Reader, Mickens.....	64.....	.32	230	New York.
Little Nature Studies, Vol. I, Burt.....	4.....	.20	96	Chicago.
Nature's Byways, Ford.....	2.....	.29	230	New York.
Nature Stories for Young Readers, Bass:				
Plants.....	6.....	.30	118	Chicago
Animals.....	18.....	.33	118	Do.
Reader for Primary Grades, Holbrook.....	11.....	.28	1	Do.
In Fableland, Serl.....	None.....			
Oriole Stories, Lane.....	7.....	.22	96	Do.
Stories for Children, Lane.....	16.....	.20	4	Do.
Polly and Dolly, Blaisdell.....	None.....			
Reynard the Fox, Smythe.....	10.....	.24	4	Do.
Little Plays for Little People, Noyes.....	13.....	.28	96	Do.
Little Dramas, Skinner and Lawrence.....	24.....	.28	4	Do.
Fishing and Hunting (Children of Many Lands), Dutton.	5.....	.24	4	Do.
Indian Primer, Fox.....	2.....	.20	4	Do.
Stories of Red Children, Brooks.....	5.....	.29	20	Do.
Around the World, Book 1, Tolman.....	75.....	.32	230	New York.
Merry Animal Tales, Bigham.....	22.....	.43	20	Chicago, Ill.
Geographical Nature Studies, Payne.....	41.....	.20	4	Do.
Humane Education, Book 1 (first part only), Page.	3.....	.36	1	Do.
In the Animal World (in color), Serl.....	11.....	.34	20	Do.
Peter and Polly, Lucia.....	4.....	.28	4	Do.
Nature Studies, Primary Grades, Cummings.	5.....	.72	4	Do.
Fanciful Flower Tales, Bigham.....	4.....	.43	20	Do.
Five Little Strangers, Schwartz.....	None.....			
Great Americans for Little Americans, Eggleston.	66.....	.32	4	Do.
Harmon B. Nivers:				
Geographical Readers—				
Book I.....	52.....	.25	1	Do.
Book II.....	16.....	.25	1	Do.
Hiawatha Primer, Holbrook.....	10.....	.32	129	Riverside Press, Cambridge, Mass.
Home Geography for Primary Pupils, Fairbanks.	37.....	.50	1	Chicago.
Around the World, Book 2, Tolman.....	78.....	.36	230	New York.
In Field and Pasture (Children of Many Lands), Dutton.	3.....	.28	4	Chicago.
Barbara's Philippine Journey Burks.....	4.....	.50	1	Do.
Ethics of Success, Book 1, Thayer.....	None.....			
Animal Fables, Stafford.....	19.....	.24	4	Do.
Book of Nature Myths, Holbrook.....	None.....			
Book of Fables and Folk Stories, Scudder.....	.....do.....			
Dramatic Stories, Skinner.....	24.....	.28	4	Do.
23 dozen.	32 dozen.	33 dozen.		

SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>SUPPLEMENTARY AND LIBRARY BOOKS—CON.</b>				
Fairy Tales for Little Readers, Burke.....	None.....	.....	.....	.....
Fairy Stories and Fables, Baldwin.....	do.....	.....	.....	.....
Legends of the Red Children, Pratt.....	do.....	.....	.....	.....
Old Indian Legends, Zit-ka-la-Za.....	12.....	\$0.40	96	Chicago.
Bunnyboy and Grizzly Bear, Smith.....	12.....	.23	20	Do.
Bunny Brighteyes, Smith.....	20.....	.23	20	Do.
The Tale of Bunny Cottontail, Smith.....	21.....	.23	20	Do.
A Boy on a Farm, Abbott.....	7.....	.26	4	Do.
Animals at Home, Bartlett.....	8.....	.26	4	Do.
Farm Life Reader, Book IV, Duncan, Evans & Duncan.....	67.....	.40	230	New York.
The Blue Bird, for Children, Masterlinck.....	13.....	.44	230	Do.
First Book of Birds, Miller.....	3.....	.48	129	Riverside Press, Cambridge, Mass.
Humane Education, Book 2, Page.....	8.....	.36	1	Chicago.
Stories of Humble Friends, Fyle.....	1.....	.40	4	Do.
Some Useful Animals, Monteith.....	2.....	.40	4	Do.
Ten Common Trees, Stokes.....	2.....	.32	4	Do.
Betty in Canada, McDonald, school edition.....	6.....	.39	20	Do.
Manuel in Mexico, McDonald, school edition.....	4.....	.39	20	Do.
Kathleen in Ireland, McDonald, school edition.....	4.....	.39	20	Do.
Donald in Scotland, McDonald, school edition.....	5.....	.39	20	Do.
The Story of Two Boys, Johnson.....	4.....	.28	4	Do.
Founders of Our Country, Coe.....	6.....	.40	4	Do.
Fifty Famous People, Baldwin.....	8.....	.28	4	Do.
Children of History, Early Times, Hancock.....	5.....	.45	1	Do.
Decas, the Indian Boy, Snedden.....	7.....	.36	118	Do.
Four American Poets (Whittier, Holmes, Bryant, Longfellow), Cody.....	3.....	.40	4	Do.
The Farmer and His Friends, Tappan.....	17.....	.40	129	Riverside Press, Cambridge, Mass.
Among the Giants, Neher.....	None.....	.....	.....	.....
Fifty Famous Stories, Baldwin.....	do.....	.....	.....	.....
Ethics of Success, Book 2, Thayer.....	3.....	.40	230	New York.
Around the World, Book 3, Tolman.....	49.....	.40	230	Do.
Our Own Country, Book III, Smith.....	3.....	.42	230	Do.
Stories of American Life and Adventure, Eggleston.....	7.....	.40	4	Chicago.
Tad and His Father, Bullard.....	32.....	.45	20	Do.
Nature Studies, Lower Grammar Grades, Cummings.....	2.....	.48	4	Do.
Farm Life Reader, Book V, Duncan, Evans & Duncan.....	25.....	.44	230	New York.
Grasshopper Green's Garden, Schwartz.....	5.....	.43	20	Chicago.
Little Brothers to the Bear, Long.....	4.....	.40	96	Do.
Nature Studies on the Farm, Keffer.....	1.....	.32	4	Do.
Our Birds and Their Nestlings, Walker.....	2.....	.48	4	Do.
Plants and Their Children, Dana.....	1.....	.52	4	Do.
Squirrels and Other Fur-Bearers, Burroughs.....	5.....	.48	129	Riverside Press, Cambridge, Mass.
Trail to the Woods, Hawkes.....	6.....	.32	4	Chicago.
The Race of the Swift, Litzey.....	2.....	1.05	1	Do.
True Bird Stories, Miller.....	6.....	.48	129	Riverside Press, Cambridge, Mass.
Wilderness Babies.....	4.....	.46	1	Chicago.
American Hero Stories, Tappan.....	6.....	.48	129	Riverside Press, Cambridge, Mass.
American Indians, Starr.....	4.....	.38	118	Chicago.
Abraham Lincoln, Baldwin.....	5.....	.40	4	Do.
Four American Explorers, Beebe.....	5.....	.40	4	Do.
Four American Inventors (Fulton, Whitney, Morse, Edison), Perry.....	3.....	.48	4	Do.
Around the World, Book 4, Tolman.....	29.....	.44	230	New York.
Four American Indians (King Philip, Pontiac, Osceola, Tecumseh), Whitney and Perry.....	1.....	.40	4	Chicago.
Indian History for Young Folks, Drake.....	None.....	.....	.....	.....
Four Great Americans (Washington, Franklin, Webster, Lincoln), Baldwin.....	6.....	.40	4	Do.
Great Inventions and Discoveries, Piercy.....	7.....	.37	168	New York.
Ethics of Success, Book 3, Thayer.....	4.....	.48	230	Do.
Four American Pioneers, Perry and Beebe.....	3.....	.40	4	Chicago.
Life of Lincoln for Boys, Sparhawk.....	5.....	.74	243	Within United States.



## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
SUPPLEMENTARY AND LIBRARY BOOKS—CON.				
Children of History, Later Times, Hancock..	3.....	\$0.46	1	Chicago.
Choice Literature, Book 1, Intermediate, Williams.	None.....			
Smoky Day's Wigwam Evenings, Eastman..	6.....	.43	20	Do.
The Children's Hour, 10 vols. (5th and higher grades), Houghton, Mifflin Co.	None.....			
Recitations for Assembly and Class Rooms (5th and higher grades), O'Neill.	4.....	.88	159	New York.
The Louisa Alcott Story Book.....	35.....	.43	20	Chicago.
Firebrands, Martin and Davis.....	3.....	.46	1	Do.
Marta in Holland, McDonald, school edition..	7.....	.39	20	Do.
Gerda in Sweden, McDonald, school edition..	7.....	.39	20	Do.
Fritz in Germany, McDonald, school edition..	3.....	.39	20	Do.
How We are Clothed, Chamberlain.....	3.....	.36	159	New York.
How We are Fed, Chamberlain.....	3.....	.36	159	Do.
How We Travel, Chamberlain.....	11.....	.36	159	Do.
How We are Sheltered, Chamberlain.....	1.....	.36	159	Do.
Stories of Industry, Vol. I, Chase & Clow.....	1.....	.45	20	Chicago.
Stories of Industry, Vol. II, Chase & Clow.....	1.....	.45	20	Do.
Stories of Useful Inventions, S. E. Forman.....	4.....	.48	41	New York.
Discovery of the Old Northwest, Baldwin.....	3.....	.48	4	Chicago.
Four American Patriots (Henry, Hamilton, Jackson, Grant), Burton.....	4.....	.40	4	Do.
Four American Naval Heroes (Perry, Paul Jones, Farragut, Dewey), Beebe.....	5.....	.40	4	Do.
Indian Boyhood, Eastman.....	5.....	1.32	20	Do.
Iron Star, The, True.....	1.....	.45	1	Do.
Indian Story and Song from North America, Fletcher.....	2.....	1.23	243	Within United States.
Dumb Animals and How to Treat Them, Whitehead.....	7.....	.44	80	Chicago.
Stories from British History, Bevan.....	3.....	.46	1	Do.
Around the World, Book 5, Tolman.....	18.....	.48	230	New York.
Pioneers of Rocky Mountains and the West, McMurray.....	None.....			
Pioneers of Land and Sea, McMurray.....	do.....			
Pioneers of the Mississippi Valley, McMurray.....	1.....	.48	159	Do.
Stories from Life, Marden.....	2.....	.36	4	Chicago.
The Wonderful House that Jack Has, Millard.....	7.....	.40	159	New York.
Black Beauty, Sewall.....	4.....	.29	20	Chicago.
Choice Literature, Book 2, Intermediate, Williams.....	None.....			
Hans Brinker, Dodge.....	do.....			
Geographical Reader, North America, Carpenter.....	31.....	.48	4	Do.
Colette in France, McDonald, school edition..	5.....	.39	20	Do.
Josefa in Spain, McDonald, school edition....	3.....	.39	20	Do.
Rafael in Italy, McDonald, school edition....	3.....	.39	20	Do.
Nature Studies, Higher Grammar Grades, Cummings.....	1.....	.60	4	Do.
Afoot and Afloat, Burroughs.....	34.....	.224	129	Riverside Press, Cambridge, Mass.
Birds and Bees, Burroughs.....	43.....	.352	129	Do.
Wild Animals I Have Known, Seton-Thompson.....	2.....	1.30	1	Chicago.
The Spring of the Year, Sharp.....	3.....	.48	129	Riverside Press, Cambridge, Mass.
Summer, Sharp.....	3.....	.48	129	Do.
The Fall of the Year, Sharp.....	3.....	.48	129	Do.
Winter, Sharp.....	3.....	.48	129	Do.
Getting Acquainted with Trees, McFarland.....	2.....	.94	159	New York.
Along Mediterranean Shores, Willard.....	9.....	.44	230	Do.
Geography of Commerce and Industry, Rocheleau.....	4.....	1.10	1	Chicago.
Commercial and Industrial Geography of the United States, Keller & Bishop.....	108.....	.80	96	Do.
Geographical Reader, Europe, Carpenter.....	12.....	.56	4	Do.
How the World is Fed, Carpenter.....	2.....	.48	4	Do.
How the World is Clothed, Carpenter.....	2.....	.48	4	Do.
How the World is Housed, Carpenter.....	2.....	.48	4	Do.
Industrial Studies, United States, Allen.....	81.....	.52	96	Do.
Industrial-Commercial Geography of United States, Rasmisel.....	14.....	.75	192	Do.
Chandra in India, McDonald, school edition..	4.....	.39	20	Do.
Umé San in Japan, McDonald, school edition..	2.....	.39	20	Do.
Boris in Russia, McDonald, school edition....	1.....	.39	20	Do.

SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contracts.	Point of delivery.
<b>SUPPLEMENTARY AND LIBRARY BOOKS—CON.</b>				
Hassan in Egypt, McDonald, school edition.	1.....	\$0.39	20	Chicago.
Captains of Industry:				
Volume I, Parton.....	None.....			
Volume II, Parton.....	do.....			
Four Great American Presidents, Perry:				
No. 1 (Washington, Jefferson, Jackson, Lincoln).	1.....	.40	1	Do.
No. 2 (Garfield, McKinley, Cleveland, Roosevelt).	None.....			
The Mohawk Valley and Lake Ontario, Morton.	6.....	.23	1	Do.
Lake Huron and the Country of the Algonquins, Morton.	6.....	.23	1	Do.
Lake Michigan and the French Explorers, Morton.	6.....	.23	1	Do.
Lake Erie and the Story of Commodore Perry, Morton.	5.....	.23	1	Do.
Choice Literature, Book 1, Grammar, Williams.	1.....	.32	4	Do.
Little Women, Alcott.....	6.....	.94	20	Do.
Little Men, Alcott.....	5.....	.94	20	Do.
Mrs. Wiggs of the Cabbage Patch, Hegan-Rice.	5.....	.75	20	Do.
Two Arrows, Stoddard.....	6.....	.36	20	Do.
Joe's Boys, Alcott.....	2.....	.94	20	Do.
Man Without a Country, Hale.....	23.....	.18	80	Do.
Robinson Crusoe, De Foe.....	24.....	.43	105	New York.
Daniel Webster for Young Americans, Richardson.	2.....	.45	1	Chicago.
Tales from Shakespeare, Lamb.....	None.....			
Hero Tales from American History, Lodge and Roosevelt.	do.....			
The Boy's Parkman, Hasbrouck.....	do.....			
Franklin's Autobiography, edited by D. H. Montgomery.	do.....			
Indian Child Life, Eastman.....	4.....	.45	1	Do.
Indian Scout Talks, Eastman.....	6.....	.70	20	Do.
Indian Sketches, Hulst.....	3.....	.48	153	Do.
Preparing for Citizenship, Guitteau.....	6.....	.60	129	Riverside Press, Cambridge, Mass.
<b>BOOKS FOR TEACHERS.</b>				
Canning, Preserving, and Jelly Making, Hill.	6.....	.70	20	Chicago.
Domestic Science, Clark.....	3.....	.80	272	St. Paul.
Domestic Art in Woman's Education, Cooley.	7.....	1.00	272	Do.
The School Kitchen Textbook, Lincoln.....	8.....	.48	272	Do.
Boston Cooking School Cookbook, Farmer.....	7.....	1.40	20	Chicago.
Dress Making in the School, Cooke & Kidd.	10.....	1.08	153	Do.
Domestic Science, Principles and Application, Bailey.	3 <sup>1</sup> .....	.60	196	Topeka, Kana.
Elements of the Theory and Practice of Cookery, Williams & Fisher.	4.....	.86	1	Chicago.
Exercises in Woodworking, Sickels.....	5.....	.80	4	Do.
Easy Experiments in Physics, Smith.....	4.....	.44	272	St. Paul.
Educational Manual Training, Schwartz.....	3.....	.90	1	Chicago.
Forge Work, William L. Ilgen.....	18.....	.64	4	Do.
Food and Cookery for the Sick, Farmer.....	3.....	1.32	272	St. Paul.
Food and Household Management, Kinne & Cooley.	2.....	.83	272	Do.
Food Study, Wellman.....	5.....	.80	272	Do.
Food and Health, Kinne & Cooley.....	5.....	.52	272	Do.
Farm Shop Work, Brace & Mayne.....	9.....	.74	1	Chicago.
Games, Seat Work, and Sense Training Exercises, Holton.	7.....	.20	20	Do.
Home and Its Management, The, Kitteridge.	5.....	1.20	272	St. Paul.
Handbook of Home Economics, Flagg.....	9.....	.60	1	Chicago.
Handbook of Elementary Sewing, Flagg.....	3.....	.40	272	St. Paul.
Handbook of Domestic Science and Household Art, Ellen H. Richards, edited by Lucy L. W. Wilson.	14.....	.80	159	New York.
Home and the Family, Kinne & Cooley.....	7.....	.64	159	Do.
How to Make Baskets, Mary White.....	4.....	.77	20	Chicago.
How to Tell Stories to Children, S. C. Bryant.	None.....			
Household Science and Arts, Morris.....	1.....	.48	4	Do.
General Science, Caldwell-Elkenberry.....	32.....	.80	96	Do.
Hygiene of the School Child, Terman.....	None.....			

<sup>1</sup> Only.

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>BOOKS FOR TEACHERS—continued.</b>				
Home Nurses' Handbook in Practical Nursing, Aikens.	6.....	\$1.20	272	St. Paul.
Primary Hand Work, Graded Course for First Four Years, W. Seegmiller.	None.....			
Primary Manual Work, First and Second Grades, Ledyard.	.....do.....			
Manual of Shoemaking, A. Dooley.	5.....	1.20	272	Do.
Morning Exercises for all the Year, J. C. Smdelar.	16.....	.50	272	Do.
Science of Home Making, Pirie.	5.....	.74	272	Do.
Seat Work and Industrial Occupations for Primary Grades, Mary Gilman, Elizabeth B. Williams.	4.....	.44	272	Do.
Shelter and Clothing, Kinne & Cooley.	4.....	.88	159	New York.
Reference Handbook for Nurses, Beck, third edition.	5.....	1.10	272	St. Paul.
King's Series in Woodwork and Carpentry, as follows:				
Elements of Woodwork.	10.....	.48	4	Chicago.
Elements of Construction.	10.....	.56	4	Do.
Constructive Carpentry.	11.....	.56	4	Do.
Inside Finishing.	9.....	.64	4	Do.
Handbook for Teachers.	6.....	.80	4	Do.
Shop Projects, Burton.	4.....	.65	1	Do.
Agricultural Engineering, Davidson.	4.....	1.12	272	St. Paul.
American Apple Orchard, The, Waugh.	2.....	.75	272	Do.
Animal Husbandry for Schools, Harper.	4.....	1.12	272	Do.
Beginnings in Animal Husbandry, Plumb.	5.....	.93	272	Do.
Bird Guide:				
Land, Reed.	1.....	.70	20	Chicago.
Western, Reed.	4.....	.70	20	Do.
Bush Fruits, Card.	None.....			
Chemistry, Its Relation to Daily Life, Kahlenberg & Hart.	2.....	1.00	272	St. Paul.
Common Diseases of Farm Animals, Craig.	4.....	1.32½	151	Chicago.
Dairy Cattle and Milk Production, Eckles.	1.....	1.28	159	New York.
Domesticated Animals and Plants, Davenport.	2.....	1.00	96	Chicago.
Elements of Farm Practice, Wilson.	None.....			
Essentials of Agriculture, Waters.	.....do.....			
Farm Animals, Hunt & Burkett.	2.....	1.13	188	New York.
Farm Management, Boss.	1.....	.72	272	St. Paul.
Farm Blacksmithing, Drew.	8.....	.37	272	Do.
Farm Machinery and Farm Motors, Davidson & Chase.	None.....			
Farm Poultry, Revised Edition, Watson.	2.....	1.20	272	Do.
Farmstead, The, Roberts.	None.....			
Fertility of the Land, Roberts.	.....do.....			
First Principles of Feeding Farm Animals, Burkett.	2.....	1.10	272	Do.
First Lessons in Dairying, Van Norman.	6.....	.45	272	Do.
First Book of Farming, Goodrich.	None.....			
Feeds and Feeding, Henry & Morrison.	.....do.....			
Fertilizers, Voorhees.	.....do.....			
Forcing Book, The, Bailey.	.....do.....			
How to Grow Vegetables, French.	.....do.....			
How to Keep Bees, Comstock.	.....do.....			
Horticulturist's Rule Book, Bailey.	.....do.....			
Introduction to Agriculture, Upham.	.....do.....			
Irrigation and Drainage, King.	.....do.....			
Milk and Its Products, Wing.	.....do.....			
Nature Study and Life, Hodge.	.....do.....			
Nature Study with Common Things, Carter.	.....do.....			
Nursery Book, The, Bailey.	.....do.....			
Plant Breeding, Bailey.	.....do.....			
Poultry Diseases, Wortley.	2.....	.60	188	New York.
Poultry Keeping, Lewis.	None.....			
Productive Horse Husbandry, Gay.	.....do.....			
Principles and Practice of Poultry Culture, Robinson.	.....do.....			
Principles of Rural Economics, Carver.	.....do.....			
Principles of Agriculture, Bailey.	.....do.....			
Principles of Fruit Growing, Bailey.	.....do.....			
Productive Feeding of Farm Animals, Well.	.....do.....			
Productive Poultry Husbandry, Lewis.	.....do.....			
Productive Swine Husbandry, Day.	.....do.....			
Productive Orchardling, Sears.	.....do.....			

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of con- trac- tor.	Point of delivery.
<b>BOOKS FOR TEACHERS—continued.</b>				
Pruning Book, The, Bailey.....	None.....	.....	.....	.....
Rural School Agriculture, Davis.....	do.....	.....	.....	.....
Rural Wealth and Welfare, Fairchild.....	do.....	.....	.....	.....
School and Home Gardens, Meier.....	do.....	.....	.....	.....
Sheep Farming, Craig.....	do.....	.....	.....	.....
Sixty Lessons in Agriculture, Buffum & Deaver.....	do.....	.....	.....	.....
Soils and Crops, Hunt & Burkett.....	do.....	.....	.....	.....
Soil, The, King.....	do.....	.....	.....	.....
Spraying of Plants, Lodeman.....	do.....	.....	.....	.....
Young Farmer, The, Hunt.....	do.....	.....	.....	.....
Vegetable Gardening, Watts.....	do.....	.....	.....	.....
Biggles Farm Library:				
Bee Book.....	3.....	\$0.40.....	1.....	Chicago.
Berry Book.....	8.....	.40.....	1.....	Do.
Cow Book.....	5.....	.40.....	1.....	Do.
Garden Book.....	3.....	.40.....	1.....	Do.
Horse Book.....	2.....	.40.....	1.....	Do.
Orchard Book.....	2.....	.40.....	1.....	Do.
Pet Book.....	2.....	.40.....	1.....	Do.
Poultry Book.....	4.....	.40.....	1.....	Do.
Sheep Book.....	2.....	.40.....	1.....	Do.
Swine Book.....	4.....	.40.....	1.....	Do.
<b>PEDAGOGY AND MISCELLANEOUS.</b>				
All the Children of All the People, Smith.....	None.....	.....	.....	.....
Blackboard Reading, Moore.....	do.....	.....	.....	.....
Everyday Problems in Teaching, O'Shea.....	do.....	.....	.....	.....
Child, The, Tanner.....	do.....	.....	.....	.....
Education by Plays and Games, Johnson.....	do.....	.....	.....	.....
Education, Thorndike.....	do.....	.....	.....	.....
For the Story Teller, Bailey.....	do.....	.....	.....	.....
For the Children's Hour, Bailey.....	do.....	.....	.....	.....
Great American Educators, Winship.....	do.....	.....	.....	.....
Handbook on Vocational Education, Taylor.....	do.....	.....	.....	.....
History of Education, Seeley.....	do.....	.....	.....	.....
How to Teach Reading, Arnold.....	do.....	.....	.....	.....
How to Study, McMurray.....	do.....	.....	.....	.....
How We Think, Dewey.....	do.....	.....	.....	.....
In the Child's World, Poulsson.....	do.....	.....	.....	.....
Language Games for All Grades, Deming.....	do.....	.....	.....	.....
Recitation, The, Hamilton.....	do.....	.....	.....	.....
Songs, Games, and Rhymes, Hallman.....	do.....	.....	.....	.....
Stories Children Need, Bailey.....	do.....	.....	.....	.....
Stars and Stripes, Stewart.....	do.....	.....	.....	.....
Teaching to Read, Turner.....	do.....	.....	.....	.....
Training of Children, The, Dinsmore.....	do.....	.....	.....	.....
Thinking and Learning to Think, Schaeffer.....	do.....	.....	.....	.....
Profitable Vocations for Boys, Weaver.....	do.....	.....	.....	.....
Vocations for Girls, Laselle & Wiley.....	do.....	.....	.....	.....
Vocations for Girls, Weaver.....	do.....	.....	.....	.....
Vocational Education, Gillette.....	do.....	.....	.....	.....
Riverside Educational Monographs, as follows:				
The Problem of Vocational Education, Snedden.....	do.....	.....	.....	.....
Education for Efficiency, Elliot.....	do.....	.....	.....	.....
Meaning of Infancy, Fiske.....	do.....	.....	.....	.....
Moral Principles in Education, Dewey.....	do.....	.....	.....	.....
Changing Conceptions of Education, Cumberly.....	do.....	.....	.....	.....
<b>ETHICS.</b>				
Course in Citizenship, Cabot, Andrews, and others.....	do.....	.....	.....	.....
Ethics for Children, Cabot.....	do.....	.....	.....	.....
Ethics for Young People, Everett.....	do.....	.....	.....	.....
Good Stories for Great Holidays, Olcott.....	do.....	.....	.....	.....
Moral Training in School and Home, Sneath & Hodges.....	do.....	.....	.....	.....
Vocational and Moral Guidance, Davis.....	do.....	.....	.....	.....
What a Young Boy Ought to Know, Stall.....	do.....	.....	.....	.....
What a Young Man Ought to Know, Stall.....	do.....	.....	.....	.....

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOLBOOKS AND SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>ETHICS—continued.</b>				
What a Young Girl Ought to Know, Allen.....	None.....	.....	.....	.....
What a Young Woman Ought to Know, Allen.....	do.....	.....	.....	.....
Young Folks Book of Etiquette (for pupils also), Griffin.....	do.....	.....	.....	.....
Boy Scouts of America, Handbook.....	do.....	.....	.....	.....
Campfire Girls of America, Handbook.....	do.....	.....	.....	.....
Systematic Moral Education, Clark.....	do.....	.....	.....	.....
<b>PHYSICAL TRAINING.</b>				
Free Gymnastics, Betz.....	do.....	.....	.....	.....
Light Gymnastics, Betz.....	do.....	.....	.....	.....
Games for the Playground, Home, School, and Gymnasium, Bancroft.....	do.....	.....	.....	.....
Graded Games and Rhythmic Exercises, Newton.....	do.....	.....	.....	.....
Rhythmic Action Plays and Dances, Moses.....	do.....	.....	.....	.....
Gymnastics, Stories, and Plays, Stoneroad.....	do.....	.....	.....	.....
Right Dress, Rellly.....	do.....	.....	.....	.....
Manual of Physical Training, Keene.....	do.....	.....	.....	.....

## SCHOOL SUPPLIES.

Blackboard erasers, noiseless and dustless....	2,701.....	\$0.07	40	Chicago.
Blackboard hyloplate, green, 3 by 5, best quality (or equal).	84.....	1.69	40	Do.
Bibles, medium size:		1.62	40	Muncie, Ind.
Revised version.....	50.....	.35	184	Chicago.
King James version.....	2.....	.58	20	Do.
Complete outfit of repairing material (for repairing music, drawings, or any printed matter).	237 boxes.....	.145	80	Do.
Call bells.....	45.....	.13	80	Do.
Crayons, chalk:				
White, dustless.....	1,023 boxes.....	.22	238	Danvers, Mass.
Colored, assorted.....	134 boxes.....	.40	238	Do.
Composition books, for ink.....	18,320 <sup>1</sup> .....	.04	78	Chicago.
Eye cards, for illiterates.....	None.....			
Educational toy money, Milton Bradley Co. (or equal).	40 sets.....	.18	172	New York or Chicago.
Geometrical surfaces and solids for school-room use.	4 sets.....	.95	14	Chicago.
Rubber printing outfit. Height of letters, etc., 1 1/4 inches. The outfit to consist of capitals and small letters, one set of figures, fractions, ornaments, punctuation marks, and miscellaneous characters; also a self-inking pad, a tube of black ink, and a ruler and spacer. The outfit to be packed in a strong, varnished wooden box.	13 boxes.....	2.70	14	Do.
Cabinet of weights and measures, with lock.	None.....			
Globes of the world:				
18 inches in diameter.....	do.....			
12 inches in diameter.....	12.....	4.45	184	Do.
8 inches in diameter, papier-mâché.....	3.....	2.07	184	Do.
Kindergarten scissors, blunt points.....	1,368 pairs.....	.06	172	New York or Chicago.
Maps, wall; size approximately 52 by 48 inches, hand-mounted, on best muslin, with or without dust-proof portable spring roller board or case:				
Arizona.....	None.....			
California.....	do.....			
Colorado.....	do.....			
Idaho.....	do.....			
Kansas.....	do.....			
Michigan.....	do.....			
Minnesota.....	do.....			
Montana.....	do.....			
Nebraska.....	do.....			
Nevada.....	do.....			
New Mexico.....	do.....			

<sup>1</sup> Lithoplate.<sup>2</sup> Only.

SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

SCHOOL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Maps, wall, etc.—Continued.</b>				
North Dakota.....	None.			
Oklahoma.....	do.			
Oregon.....	do.			
Pennsylvania.....	do.			
South Dakota.....	do.			
United States, large.....	do.			
Utah.....	do.			
Washington.....	do.			
Wisconsin.....	do.			
Wyoming.....	do.			
Europe.....	do.			
Asia.....	do.			
Africa.....	do.			
Australia.....	do.			
North America.....	do.			
South America.....	do.			
Individual outline maps, 9½ by 11½ inches (in pads of 50), as follows:				
North America.....	65 pads.....	\$0.20	172	New York or Chicago.
South America.....	35 pads.....	.20	172	Do.
Europe.....	51 pads.....	.20	172	Do.
Australia.....	20 pads.....	.20	172	Do.
Asia.....	30 pads.....	.20	172	Do.
Africa.....	29 pads.....	.20	172	Do.
United States.....	114 pads.....	.20	172	Do.
United States, sectional—				
Section 1, North Atlantic States.....	34 pads.....	.25	184	Chicago.
Section 2, South Atlantic States.....	33 pads.....	.25	184	Do.
Section 3, North Central States.....	do.....	.25	184	Do.
Section 4, South Central States.....	34 pads.....	.25	184	Do.
Section 5, Western States.....	38 pads.....	.25	184	Do.
Blackboard outline maps, United States, 78 by 50 inches, Engle or equal.	None.			
New Testament, medium size, revised version.	do.			
Pencil sharpeners, lead.....	140.....	.60	80	Do.
Pencil erasers.....	384 dozen.....	.08	80	Do.
Plaster of Paris, in 5 and 10 pound cans.....	285 pounds <sup>1</sup> .....	.12	121	Do.
Newspaper stock, 5 by 7 inches.....	6,600 pounds <sup>1</sup> .....	.055	288	San Francisco.
Practice paper, Spencerian (per 100 sheets):				
Small.....	125,900 sheets <sup>1</sup> .....	.097	78	Chicago.
Large.....	197,300 sheets <sup>1</sup> .....	.1339	78	Do.
Rules, wood, 12-inch.....	92 dozen <sup>1</sup> .....	.0665	78	Do.
Perry pictures, 22 by 28 inches:				
Angel Heads, Reynolds.....	None.			
A June Morning, Loveridge.....	do.			
An Old Monarch, Rosa Bonheur.....	do.			
Cattle of Brittany, Rosa Bonheur.....	do.			
Calling the Ferryman, Ridgeway Knight.....	do.			
Leaving the Hills, Farquharson.....	do.			
Children of Charles I, Van Dyck.....	do.			
Under the Elms, C. Loveridge.....	do.			
An Off Shore Breeze, Rose.....	do.			
Forest Pool, B. Lambert.....	do.			
Evening's Cooling Shades, Chwala.....	do.			
Queen Louise, Richter.....	do.			
Ann Hathaway's Cottage, U. Ball.....	do.			
Hoses, Sargeant.....	do.			
Grand Canal.....	do.			
Princes in the Tower, Millais.....	do.			
On the Prairie, Dupré.....	do.			
Pharaoh's Horse, Herring.....	do.			
Return to the Farm, Troyon.....	do.			
Sir Galahad, Watts.....	do.			
Star at Bay, Landseer.....	do.			
St. Cecilia, Narjok.....	do.			
The Gleaners, Millet.....	do.			
The Sanctuary, Landseer.....	do.			
The Shepherdess, Lerolle.....	do.			
<b>Portraits:</b>				
Bryant, William Cullen.....	do.			
Franklin, Benjamin.....	do.			
Garfield, James A.....	do.			
Handel.....	do.			
Holmes, Oliver W.....	do.			
Jefferson, Thomas.....	do.			

<sup>1</sup>Only.

## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## SCHOOL SUPPLIES—Continued.

Article.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>Portraits—Continued.</b>				
Lafayette, Gen.	None			
Lee, Robert E.	do.			
Lincoln, Abraham.	do.			
Longfellow, Henry W.	do.			
Mendelssohn	do.			
Shakespeare.	do.			
Schubert.	do.			
Washington, Gen. George.	do.			
Washington, Martha	do.			
Webster, Daniel.	do.			
Whittier, John G.	do.			
Registers, White's new common-school (or equal).	do.			

## KINDERGARTEN MATERIAL.

Articles.	Catalogue No.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
First gift.	1	9 boxes	\$1.12	172	New York or Chicago.
Second gift.	2	6 boxes	.56	172	Do.
Third gift.	3	5 boxes <sup>1</sup>	.18	244	New York.
Fourth gift.	4	do.	.18	244	Do.
Fifth gift.	5	4 boxes	.38	172	New York or Chicago.
Fifth gift B.	5B	1 box	.38	172	Do.
Sixth gift.	6	do.	.38	172	Do.
Seventh gift, as follows:					
Tablets (wood)—					
A.	22	9 boxes <sup>1</sup>	.39	244	New York.
B.	22	5 boxes <sup>1</sup>	.39	244	Do.
C.	22	do.	.39	244	Do.
D.	22	do.	.39	244	Do.
E.	22	do.	.39	244	Do.
G.	22	None			
H.	22	do.			
K.	22	do.			
<b>PARQUETRY.</b>					
Assortment No. 6A.	2000	52 boxes	.15	172	New York or Chicago.
Do.	2003	10 boxes	.40	172	Do.
<b>Circles:</b>					
R.	2151	50 packages	.06	172	Do.
O.	2151	53 packages	.06	172	Do.
Y.	2151	51 packages	.06	172	Do.
G.	2151	52 packages	.06	172	Do.
B.	2151	40 packages	.06	172	Do.
V.	2151	50 packages	.06	172	Do.
<b>Squares:</b>					
R.	2151	54 packages	.06	172	Do.
O.	2151	41 packages	.06	172	Do.
Y.	2151	do.	.06	172	Do.
G.	2151	51 packages	.06	172	Do.
B.	2151	do.	.06	172	Do.
V.	2151	49 packages	.06	172	Do.
<b>Equilateral triangles:</b>					
R.	2151	44 packages	.06	172	Do.
O.	2151	39 packages	.06	172	Do.
Y.	2151	do.	.06	172	Do.
G.	2151	42 packages	.06	172	Do.
B.	2151	38 packages	.06	172	Do.
V.	2151	37 packages	.06	172	Do.
<b>PAPER FOR STRINGING.</b>					
R.	2144R	60 packages <sup>1</sup>	.09	244	New York.
O.	2144O	33 packages <sup>1</sup>	.09	244	Do.
G.	2144G	65 packages <sup>1</sup>	.09	244	Do.
B.	2144B	27 packages <sup>1</sup>	.09	244	Do.
R, W, B, assorted.	2144D	78 packages <sup>1</sup>	.09	244	Do.

<sup>1</sup> Only.

SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

KINDERGARTEN MATERIAL—Continued

Article.	Catalogue No.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>SEWING CARDS.</b>					
Cards, 5½ by 5½:					
Sistine Madonna, plain ribbon.	193-E-1	705.....	\$0.01	172	New York.
Washington.....	193-E-9	1,220.....	.01	172	Do.
Lincoln.....	191-E-10	986.....	.01	172	Do.
Valentine.....	193-E-14	1,337.....	.01	172	Do.
Easter.....	193-D-907	1,336.....	.01	172	Do.
Puritans Going to Church.....	193-E-23	913.....	.01	172	Do.
Blank sewing cards:					
4 by 5½.....		144 packages.....	.14	80	Chicago.
5 by 5.....		116 packages.....	.18	80	Do.
<b>WEAVING.</b>					
Schute weaving cards:					
4-inch disk.....		25 dozen.....	.12	172	New York or Chicago.
6-inch disk.....		44 dozen.....	.10	172	Do.
Bodkins for Schute weaving cards.		none.....			
R mats, 7 by 7, slits ½ by ½, alternating.	1029-R	63 packages <sup>1</sup> .....	.119	244	New York.
O mats, 7 by 7, slits ½ by ½, alternating.	1029-O	71 packages <sup>1</sup> .....	.119	244	Do.
R, O, Y, G, B, V, 7 by 7, tints and shades and grays.	1030	181 packages <sup>1</sup> .....	.119	244	Do.
R, O, Y, G, B, V, 4½ by 4½, tints and shades and grays.	1110	83 packages <sup>1</sup> .....	.079	244	Do.
R, O, Y, G, B, V, 4 by 4, slits, alternating.	1140	133 packages <sup>1</sup> .....	.079	244	Do.
Weaving needles, Ball's patent.....		373 packages.....	.04	172	Chicago.
<b>MRS. HAILMAN'S GRADED MATS.</b>					
4 by 4, with 6 strips.....	1201	72 packages.....	.16	172	Do.
4 by 4, with 10 strips.....	1206	73 packages.....	.16	172	Do.
<b>PAPER CUTTING.</b>					
Squares, 4 by 4:					
White.....	209	81 packages.....	.06	172	Do.
Red, tints and shades.....	211-R	100 packages.....	.12	172	Do.
Orange.....	211-O	78 packages.....	.12	172	Do.
Assorted colors.....	211-H	166 packages.....	.12	172	Do.
Equilateral triangles, 4 by 4:					
Coated, assortment A.....	212-X	45 packages.....	.18	172	Do.
Green, tints and shades.....	212-G	35 packages.....	.18	172	Do.
Circles, 4 by 4:					
Coated, assortment A.....	213-X	80 packages <sup>1</sup> .....	.17	244	New York.
Red, tints and shades.....	213-R	83 packages <sup>1</sup> .....	.17	244	Do.
<b>CLAY MODELING.</b>					
New process clay flour (6 pounds in a box).	457	255 pounds <sup>1</sup> .....	2.24	244	Do.
Modeling tools:					
Figure 1.....	454	9 dozen.....	.19	172	New York or Chicago.
Figure 2.....	454	10 dozen.....	.19	172	Do.
Modeling boards:					
No. 1, 7 by 9.....	455	3 dozen.....	1.00	172	Do.
No. 2, 9 by 12.....	455	do.....	1.12	172	Do.
<b>RINGS FOR RING LAYING.</b>					
500 rings, gummed:					
1-inch, in 6 shades and colors.....	112	68 packages.....	.35	172	Do.
1½-inch, 6 colors, tints and shades.....	112	40 packages <sup>1</sup> .....	.39	244	New York.
500 rings, 2-inch, 6 colors, tints and shades.....	112	33 packages <sup>1</sup> .....	.39	244	Do.
Soldered rings, 1, 1½, and 2 inch.....	110	14 packages.....	.50	172	New York or Chicago.
<b>WORSTED AND SILKATEEN.</b>					
Assorted colors, silkateen.....	195A	194 boxes <sup>1</sup> .....	.36	78	Chicago.
Germantown worsted of R, O, Y, G, B, V, black, white, light brown, gray 1, and gray 2.....	198A	382 laps <sup>1</sup> .....	.174	244	New York.

<sup>1</sup> Only.

<sup>2</sup> Per box.



## SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

## KINDERGARTEN MATERIAL—Continued.

Article.	Catalogue No.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>MISCELLANEOUS.</b>					
Needles:					
Nos. 18, 20, 23, and 25 .....	199	198 papers .....	\$0.07	172	New York or Chicago.
Perforating, medium .....	171	15 dozen .....	.207	244	New York.
Perforating, coarse .....	171A	11 dozen .....	.30	172	New York or Chicago.
Pricking cushions .....	173	4, dozen .....	.90	172	Do.
Hooks, to suspend drawings, etc. ....	37	29, gross .....	.58	80	Chicago.
Studio paper cutter, 10-inch blade ..	4259	7, gross .....	1.80	80	Do.
Yardsticks .....		118 .....	.046	80	Do.
Educational clock dial, 12-inch .....		27 .....	.145	14	Do.
Sectional animals (in box) .....	4183	67 sets .....	.06	172	New York or Chicago.
Sectional birds (in box) .....	4194	79 sets .....	.06	172	Do.
Dissected map of United States, 15 by 22, in wood .....	4264	35 sets .....	.45	172	Do.
Ludington's Picture Problems:					
Part 1 .....		39 sets .....	.20	172	Do.
Part 2 .....		32 sets .....	.20	172	Do.
Primary peg boards, square form .....		10 dozen .....	1.10	172	Do.
Round pegs, 6 colors .....		96 boxes <sup>1</sup> .....	.124	244	New York.
Dushane's figure cards .....		31 sets .....	.18	14	Chicago.
<b>BOOKS.</b>					
Kinderarten Chimes, Kate Douglas Wiggin .....		None .....			
Songs and Games for Little Ones, Harriet S. Jenks and Gertrude Walker .....		do .....			
Finger Plays, Emilie Poulsen .....		do .....			
<b>PAPER.</b>					
Bradley's tinted drawing, construction, and mounting papers, 12 by 18, in packages of 50 sheets, as follows:					
No. 1, light brown .....		77 packages .....	.18	80	Do.
No. 4, gray-blue .....		41 packages .....	.18	80	Do.
No. 7, light gray .....		68 packages .....	.18	80	Do.
No. 8, blue .....		63 packages .....	.30	172	New York or Chicago.
No. 12, green .....		83 packages .....	.30	172	Do.
No. 14, red .....		81 packages .....	.40	172	Do.
No. 20, gray .....		72 packages .....	.20	172	Do.
<b>RULED DRAWING PAPER.</b>					
25 sheets, 17 by 22:					
1/2-inch squares .....	134	87 packages <sup>1</sup> .....	.29	244	New York.
1-inch squares .....	136A	113 packages <sup>1</sup> .....	.29	244	Do.
<b>UNRULED MOUNTING SHEETS.</b>					
12 leaves, 7 by 7, white bristol .....	76	184 packages <sup>1</sup> .....	.06	244	Do.
<b>STRAWS AND STRINGING.</b>					
Straws, 3/4 inch long:					
Waxed .....	463B	33 thousand <sup>1</sup> .....	.19	172	New York or Chicago.
6 colors .....	463C	38 thousand .....	.26	172	Do.
<b>GUMMED PAPER DOTS.</b>					
Squares, in envelope, 6 colors .....	459	32 thousand <sup>1</sup> .....	.119	244	New York.
Circles, in envelope, 6 colors .....	459A	do .....	.119	244	Do.
Silver stars .....	459C	219 hundred .....	.045	80	Chicago.
United States flag .....	459E	500 hundred .....	.058	14	Do.
<b>STICKS.</b>					
5 inches, plain sticks .....	90	22 thousand .....	.15	172	Do.
3 inches, plain sticks .....	92	16 thousand .....	.11	172	Do.
Six colors, from 1 to 5 inches in length .....	103	33 boxes .....	.55	172	Do.
Round shoe laces, black .....	471	28 dozen .....	.10	80	Do.

<sup>1</sup> Only.

SCHOOLBOOKS, SCHOOL DESKS, ETC.—Continued.

KINDERGARTEN MATERIAL—Continued.

Article.	Catalogue No.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
<b>PAPER STRIPS FOR LACING.</b>					
1/2 inch wide, 6 colors.....	430A	113 packages.....	\$0.04	80	Chicago.
1/2 inch wide, 6 colors.....	431A	41 packages.....	.06	80	Do.
1/2 inch wide, R, W, B.....	434A	54 packages.....	.08	80	Do.
<b>DISCONNECTED SLATS.</b>					
Slats, 10 inches long:					
6 colors.....	413	21 hundred <sup>1</sup> .....	.12 1/2	244	New York.
Plain.....	411	9 hundred <sup>1</sup> .....	.07	244	Do.
<b>JOINTED SLATS.</b>					
Of 8 links.....	422	10 sets.....	.12	172	New York or Chicago.
Of 10 links, extra heavy.....	425	10 sets.....	.18	172	Do.
Of 16 links, extra heavy.....	424	10 sets.....	.25	172	Do.

SCHOOL DESKS.

Desks, school, with seats, single:					
No. 1, for scholars 18 to 21 years old.....	.....	None.....	.....	.....	.....
No. 2, for scholars 15 to 18 years old.....	.....	.....do.....	.....	.....	.....
No. 3, for scholars 13 to 15 years old.....	.....	.....do.....	.....	.....	.....
No. 4, for scholars 11 to 13 years old.....	.....	.....do.....	.....	.....	.....
No. 5, for scholars 8 to 11 years old.....	.....	.....do.....	.....	.....	.....
No. 6, for scholars 5 to 7 years old.....	.....	.....do.....	.....	.....	.....
Desks, school, back seats for, single:					
No. 1.....	.....	.....do.....	.....	.....	.....
No. 2.....	.....	.....do.....	.....	.....	.....
No. 3.....	.....	.....do.....	.....	.....	.....
No. 4.....	.....	.....do.....	.....	.....	.....
No. 5.....	.....	.....do.....	.....	.....	.....
Desks, school, single, adjustable:					
Large; cover 1 to 3 regular desks.....	.....	.....do.....	.....	.....	.....
Medium; cover 3 to 5 regular desks.....	.....	.....do.....	.....	.....	.....
Small; cover 4 to 6 regular desks.....	.....	.....do.....	.....	.....	.....
Desks and chairs, steel, adjustable, single:					
1 or A, for scholars 10 years up.....	.....	.....do.....	.....	.....	.....
2 or B, for scholars 6 to 11 years.....	.....	.....do.....	.....	.....	.....
3 or C, for scholars 4 to 7 years.....	.....	.....do.....	.....	.....	.....

<sup>1</sup> Only.

## COMMISSIONER OF INDIAN AFFAIRS.

## GASOLINE, KEROSENE, AND OLEOMARGARINE.

[Bids opened in St. Louis, May 15, 1918.]

Article.	Catalogue No.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Gasoline, 86° Baumé (per gallon).....		2,000 gallons.....	\$0.435	240	F. o. b. Whiting, Ind.
		32,490 gallons.....	1.5475	240	Do.
		600 gallons.....	1.25	269	Laona Agency, Wis.
		2,200 gallons.....	1.25	256	El Paso, Tex.
Gasoline, 58° to 64° (per gallon).....		800 gallons.....	1.255	256	Albuquerque, N. Mex.
		800 gallons.....	1.26	256	Santa Fe, N. Mex.
		1,500 gallons.....	1.265	256	Globe, Ariz.
		4,000 gallons.....	1.245	256	Tucson, Ariz.
		250 gallons.....	1.226	200	Pipestone, Minn.
		28,160 gallons.....	1.1107	15	St. Louis, Mo.
		2,500 gallons.....	1.18	256	Globe, Ariz.
		850 gallons.....	1.16	256	Albuquerque, N. Mex.
		750 gallons.....	1.15	256	El Paso, Tex.
		500 gallons.....	1.145	256	Tucson, Ariz.
		300 gallons.....	1.165	256	Santa Fe, N. Mex.
			1.18	239	San Francisco, Cal.
Kerosene (per gallon).....			1.085	239	Los Angeles, Cal.
			1.19	239	San Diego, Cal.
		9,220 gallons.....	1.085	239	Portland, Oreg.
			1.195	239	Tacoma, Wash.
			1.085	239	Seattle, Wash.
			1.114	8	Pipestone, Minn.
Oleomargarine (per pound).....		200 gallons.....	1.114	200	Chicago or Kansas City.
		24,640 pounds.....	1.24875		

## AUTOMOBILE SUPPLIES.

[Bids opened in Chicago Apr. 15, 1918.]

Tire chains.....	111 pairs <sup>1</sup> .....		121	Chicago.
30 by 3 inches.....		\$2.93	121	Do.
30 by 3½ inches.....		3.20	121	Do.
32 by 3½ inches.....		3.45	121	Do.
34 by 3½ inches.....		3.88	121	Do.
34 by 4 inches.....		4.50	121	Do.
36 by 4½ inches.....		5.18	121	Do.
Spark plugs.....	985.....	.38	115	Do.
Inner tubes:				
30 by 3.....	55 <sup>2</sup> .....	1.80	131	New Brunswick, N. J.
30 by 3½.....	683.....	2.10	131	Do.
32 by 3½.....	22.....	2.19	131	Do.
34 by 3½.....	None.....	2.25	131	Do.
34 by 4.....	10.....	2.76	131	Do.
36 by 4½.....	None.....	3.52	131	Do.
Casings:				
30 by 3.....	521 <sup>3</sup> .....	11.11	79	( <sup>4</sup> )
30 by 3½.....	612.....	14.49	79	( <sup>4</sup> )
32 by 3½.....	48.....	17.00	79	( <sup>4</sup> )
34 by 3½.....	None.....	19.76	79	( <sup>4</sup> )
34 by 4.....	2.....	24.22	79	( <sup>4</sup> )
36 by 4½.....	None.....	34.67	79	( <sup>4</sup> )

<sup>1</sup> In barrels.<sup>2</sup> In 5-gallon cans.<sup>3</sup> In two 5-gallon cans, cased.<sup>4</sup> In 30 or 60 pound tubs.<sup>5</sup> Only.<sup>6</sup> Clincher.<sup>7</sup> Prices expire by limitation Dec. 31, 1918. Clincher or straight side.<sup>8</sup> New York, Chicago, Omaha, Kansas City, St. Louis, St. Paul, San Francisco, Los Angeles, Portland, or Seattle.

## MISCELLANEOUS SUPPLIES.

[Bids opened in St. Louis, Mo., May 20, 1918.]

Articles.	Quantity awarded.	Unit price.	No. of contractor.	Point of delivery.
Galvanized steel barrels, 55 gallons capacity, with the words "Indian Service" embossed thereon, and also the word "Gasoline" or "Kerosene," as the service may require:				
For gasoline.....	None.....			
For kerosene.....	do.....			
Carbide (or carbolite), in iron drums.....	172 tons.....	(1)	262	(1)
Fire extinguishers, chemical, good quality, as follows:				
Inverted type, soda and acid, 2½ to 3 gallons capacity.....	79.....	\$9.50	173	St. Louis.
"Squirt-gun" type, about 1 quart capacity, charged with liquid chemicals and ready for immediate use.....	53.....	5.00	206	New York.
Fluid, chemical (carbon tetrachloride base), for recharging the 1-quart fire extinguishers.....	37 gallons.....	{ \$ 3.33 \$ .83½	{ 206 206	{ Do.
Bills, black leather, shot-loaded, leather loop and button: medium weight.....	None.....			
Handcuffs, steel, self-locking, adjustable.....	do.....			

## ELECTRICAL SUPPLIES.

[The following electrical supplies must conform to the requirements of the National Electrical Code.]

Wire, rubber-covered, double-braided, solid; No. 14.....	None.....			
Wire, rubber-covered, for fixtures, light; No. 18.....	do.....			
Sockets, Edison key:				
1-inch cap.....	do.....			
1-inch cap.....	do.....			
Sockets, Edison keyless:				
1-inch cap.....	do.....			
1-inch cap.....	do.....			
Receptacles, separate bowl, attachment plug, Edison base.....	do.....			
Batteries, dry; good quality, round, 2½ inches by 6 inches.....	do.....			
Cord, flexible, electric lamp and heater; cotton covered, twisted pair; No. 16.....	do.....			

## COAL.

[Bids opened in Washington, D. C., June 5, 1918.]

Coal, soft, lump.....	{ 800 tons..... 750 tons..... 30 tons.....	{ \$4.00 3.30 13.00	{ 154 268 139½	{ (5) (5) (5)
Coal, soft, mine run.....	1,200 tons.....	3.00	154	(10)
Coal, soft, nut.....	220 tons.....	2.75	154	(11)

<sup>1</sup> If Sault Ste. Marie, Mich. (works), delivery..... per ton.. \$60.00  
 If Chicago, Ill.; Minneapolis, Minn.; East St. Louis, Ill.; Fargo, N. Dak.; Sioux City, Iowa; Omaha, Nebr.; St. Joseph, Mo.; or Kansas City, Mo., deliveries..... per ton.. 90.00  
 If Oklahoma City, Okla., delivery..... do..... 100.00  
 If El Paso, Tex., delivery..... do..... 105.00  
 If Denver, Colo., delivery..... do..... 102.00  
 If Salt Lake City, Utah, delivery..... do..... 108.00  
 If San Francisco, Cal.; Los Angeles, Cal.; Portland, Oreg.; Seattle, Wash.; or Sacramento, Cal., deliveries..... per ton.. 107.00

<sup>2</sup> Only.<sup>3</sup> In 1-gallon cans.<sup>4</sup> In 1-quart cans.<sup>5</sup> Monero, N. Mex. (for Southern Ute Agency and school, Colo., and Jicarilla Agency and School, N. Mex.).<sup>6</sup> Winter quarters, Utah (for Carson School, Nev., and Walker River Agency and School, Nev.).<sup>7</sup> In school boat.<sup>8</sup> In school bins.<sup>9</sup> Neah Bay (for Neah Bay Agency and day schools).<sup>10</sup> Monero, N. Mex. (for Santa Fe School, N. Mex.).<sup>11</sup> Monero, N. Mex. (for Jicarilla Agency and School, N. Mex.).

*Contracts awarded for beef, pork, and mutton for the Indian Service for the fiscal year ending June 30, 1919.*

[Bids opened in Washington, D. C., June 10, 1918.]

## BEEF, NET.

Agency, school, etc.	Quantity awarded.	Price per 100 pounds.	Number of contractor.	Point of delivery.
	<i>Pounds.</i>			
Canton Asylum for Insane Indians, South Dakota.	<sup>1</sup> 3,900	\$17.25	61	Canton, S. Dak.
Carlisle School, Pennsylvania.	<sup>1</sup> 4,000	22.97	253	Carlisle School.
Carson School, Nevada.	30,000	16.90	136	Stewart, Nev.
Chillico School, Oklahoma.	100,000	16.69	171	Chillico School.
Cross Lake School, Minnesota.	6,500	16.50	140	Cross Lake School.
Cushman School, Washington.	45,000	20.25	37½	Cushman School.
Cheyenne and Arapahoe School, Oklahoma.	<sup>1</sup> 4,000	17.50	61	Concho, Okla.
Eufaula School, Oklahoma.	<sup>2</sup> 500	17.50	61	Eufaula, Okla.
Fort Hall School, etc., Idaho.	50,000	17.50	127	Fort Hall Agency.
Fort Lapwai Sanatorium, Idaho.	15,000	20.92	37½	Fort Lapwai, Idaho.
Flandreau School, South Dakota.	<sup>1</sup> 7,000	17.50	61	Flandreau, S. Dak.
Genoa School, Nebraska.	65,000	17.50	233	Genoa School.
Haskell Institute, Kansas.	<sup>1</sup> 14,000	16.80	61	Haskell Institute.
Hayward School, Wisconsin.	<sup>1</sup> 1,500	17.50	61	Hayward, Wis.
Keshena School, Wisconsin.	<sup>1</sup> 2,000	18.20	253	Shawano, Wis.
Kiowa Hospital, Oklahoma.	6,000	( <sup>9</sup> )	157	Lawton, Okla.
Kickapoo School, Kansas.	<sup>1</sup> 3,000	18.73	50	Germantown, Kans.
Lac du Flambeau School, Wisconsin.	<sup>1</sup> 2,500	17.50	61	Lac du Flambeau, Wis.
Mekusuk Academy, Oklahoma.	12,000	17.40	103	Seminole, Okla.
Osage School, Oklahoma.	<sup>1</sup> 1,000	17.50	61	Pawhuska, Okla.
Phoenix School, Arizona.	120,000	12.50	259	Phoenix School.
Pierre School, South Dakota.	<sup>1</sup> 1,800	17.50	61	Pierre, S. Dak.
Pipestone School, Minnesota.	<sup>1</sup> 6,000	17.50	61	Pipestone, Minn.
Ponca School, Oklahoma.	<sup>1</sup> 800	17.50	61	Whiteagle, Okla.
Pueblo Bonito School, New Mexico.	17,000	15.00	22	Pueblo Bonito Agency.
Rapid City School, South Dakota.	<sup>1</sup> 1,500	18.70	253	Rapid City, S. Dak.
Red Lake School, Minnesota.	12,000	16.00	140	Red Lake School.
Red Lake Hospital, Minnesota.	2,500	16.00	140	Red Lake Hospital.
San Juan School, New Mexico.	10,000	15.00	132	Shiprock, N. Mex.
Santa Fe School, New Mexico.	40,000	14.75	77	Santa Fe School.
Salem School, Oregon.	100,000	16.50	59	Salem School.
Seger School, Oklahoma.	<sup>1</sup> 1,300	16.90	61	Weatherford, Okla.
Shawnee School, Oklahoma.	12,000	17.00	103	Shawnee School.
Seneca School, Oklahoma.	<sup>1</sup> 4,500	18.73	50	Wyandotte, Okla.
Tomah School, Wisconsin.	<sup>1</sup> 5,000	18.10	253	Tomah, Wis.
Tulalip School, Washington.	23,000	29.45	87	Tulalip, Wash.
Turtle Mountain Day Schools, North Dakota.	<sup>1</sup> 1,760	22.00	191½	Rolla, N. Dak.
Turtle Mountain Hospital, North Dakota.	<sup>1</sup> 2,000	22.00	191½	Do.
Vermillion Lake School, Minnesota.	<sup>1</sup> 3,000	17.50	61	Tower, Minn.

## BEEF, GROSS.

Fort Belknap School, Montana.	32,310	\$8.90	149	Fort Belknap Agency.
Rocky Boy Agency, Montana.	15,000	9.20	149	Box Elder, Mont.

## FRESH PORK.

Red Lake Hospital, Minnesota.	300	\$23.00	140	Red Lake Hospital.
Turtle Mountain Hospital, North Dakota.	<sup>1</sup> 300	30.00	191½	Rolla, N. Dak.

## MUTTON.

Red Lake Hospital, Minnesota.	200	\$25.00	140	Red Lake Hospital.
Pueblo Bonito School, New Mexico.	12,900	15.00	22	Pueblo Bonito Agency.

<sup>1</sup> July 1 to Sept. 30, 1918.

<sup>2</sup> Sept. 1 to Sept. 30, 1918.

<sup>3</sup> Loin steak, 30 cents per pound; round steak, 30 cents per pound; chuck roast, 25 cents per pound; rib roast, 30 cents per pound; hamburger, 25 cents per pound.

<sup>4</sup> July 1 to Dec. 31, 1918.

<sup>5</sup> Only.

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**REPORT OF THE BOARD OF INDIAN  
COMMISSIONERS**

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**329**

## BOARD OF INDIAN COMMISSIONERS.

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MERRILL E. GATES, Washington, D. C.; appointed June 27, 1884.  
GEORGE VAUX, Jr., Philadelphia, Pa.; appointed November 27, 1906.  
WARREN K. MOOREHEAD, Andover, Mass.; appointed December 19, 1908.  
SAMUEL A. ELIOT, Boston, Mass.; appointed November 27, 1909.  
FRANK KNOX, Manchester, N. H.; appointed May 2, 1911.  
EDWARD E. AYER, Chicago, Ill.; appointed November 18, 1912.  
WILLIAM H. KETCHAM, Washington, D. C.; appointed December 3, 1912.  
DANIEL SMILEY, Mohonk Lake, N. Y.; appointed December 17, 1912.  
ISIDORE B. DOCKWEILER, Los Angeles, Cal.; appointed December 22, 1913.  
MALCOLM McDOWELL, Chicago, Ill.; appointed May 23, 1917.  
GEORGE VAUX, Jr., *Chairman.*  
MALCOLM McDOWELL, *Secretary.*

# **FORTY-NINTH ANNUAL REPORT BOARD OF INDIAN COMMISSIONERS.**

**FISCAL YEAR ENDED JUNE 30, 1918.**

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WASHINGTON, D. C., *September 1, 1918.*

**SIR:** We have the honor of submitting herewith the Forty-ninth Annual Report of the United States Board of Indian Commissioners for the fiscal year ended June 30, 1918, and invite your attention to the recommendations contained therein.

Members of this body during the year have inspected and made surveys of conditions of 45 reservations, schools, hospitals, and other branches of the Indian Service, and their special reports thereon have been transmitted to you with their recommendations and suggestions, some of which have been adopted and put into effect, while others are still under consideration.

We laid before the Commissioner of Indian Affairs several urgent matters coming to our attention, and Commissioner Sells took prompt action on those which he considered of an emergency character.

## **INSPECTIONS AND SURVEYS.**

We beg to invite your attention to the following summary of inspections, surveys, and recommendations made by members of this board:

**INDIAN LABOR IN ARIZONA** (filed Aug. 20, 1917), by Commissioner Ayer, who recommended that an agent in the Indian Service be detailed to look after the interests of Indian laborers and to cooperate with superintendents in Arizona, New Mexico, and eastern California in securing Indians for cotton picking and to see that the Indians not only receive adequate pay but are provided with decent living conditions. (See Appendix A.)

**MENOMINEE RESERVATION, WIS.** (filed Dec. 27, 1917), by Commissioner Ayer, who renewed recommendations made in January, 1914, for stocking the pasture lands of the Menominee Reservation with a tribal herd. (See Appendix B.)

**INDIANS FOR NATIONAL PARKS AND FORESTS** (filed Dec. 27, 1917), by Commissioner Ayer, who recommended that Indians be employed to replace at least 75 per cent of the white rangers, guards, and other employees in national parks and forests. (See Appendix C.)

**CHOCTAWS IN MISSISSIPPI** (filed Jan. 15, 1918), by Commissioner Ketcham, who made certain recommendations for an appropriation to establish an agent-physician, field matron, etc., in the Choctaw country in Mississippi and to provide school facilities for the Indian children.



The appropriation and necessary legislation were secured from Congress, and the Indian Office has begun its work for the benefit and civilization of these Indians. (See Appendix D.)

**HEALTH DRIVE IN OKLAHOMA** (filed Jan. 16, 1918), by Commissioner Ketcham, who made recommendations as follows: That every effort be made by the Board of Indian Commissioners to assist Commissioner Sells in securing a congressional appropriation to enable him to establish a permanent organization for health work among the Choctaws and Cherokees in particular and to inaugurate similar work among other Oklahoma tribes where tuberculosis is prevalent; that a Choctaw-speaking official be appointed for the Talihina Sanitarium; that cottages and tents be put up for the older patients in this institution and that State aid be secured to segregate tubercular Indians; that the health pamphlets printed in the Choctaw language be more widely distributed and similar health pamphlets, in the Indian tongues, be printed and distributed for the benefit of other Oklahoma tribes. (See Appendix E.)

**BLACKFEET RESERVATION, MONT.** (filed Jan. 16, 1918), by Commissioner McDowell. Among the several recommendations made are the following: That the agency headquarters be moved from the present site to a point on the Great Northern Railroad 2 miles distant and suitable buildings be erected for administrative and residence purposes, or else that the present buildings be repaired to provide decent living quarters for officials and employees and water and drainage systems be installed and other improvements made; that the Government cooperate with the State of Montana in enlarging the public-school plant at Browning and that a day school be placed in the Cutbank district; that the reservation boarding school be enlarged to care for 250 children and a modern dairy barn be built for that school; that field matrons be appointed for the Heart Butte and Cutbank districts and adequate transportation facilities be provided for all field matrons; and that if the so-called Ten-mile strip is sold the proceeds be prorated and used to purchase cattle for individual Indians. (See Appendix F.)

**ROCKY BOY BAND, MONT.** (filed Feb. 7, 1918), by Commissioner McDowell, who recommended that definite arrangements for a contract physician be made for the benefit of the Indians; that the present system of issuing rations to them, when needed, be continued for a few years until their farms can sustain them. (See Appendix G.)

**SEMINOLES OF OKLAHOMA** (filed Feb. 4, 1918), by Commissioner Ketcham. Certain matters in connection with this tribe were taken up with the Secretary of the Interior and the Commissioner of Indian Affairs, who acquiesced in the recommendations made. (See Appendix H.)

**KIOWA, AGENCY, OKLA.** (filed Feb. 14, 1918), by Commissioner Ketcham, who recommended that a tent colony for tubercular patients be established on the grounds of the Fort Sill sanitarium, and that the Indian Office be urged to cooperate with the State of Oklahoma in enforcing segregation of tubercular patients. (See Appendix I.)

**CROW RESERVATION, MONT.** (filed Mar. 12, 1918), by Commissioner McDowell, who recommended, among other things, that the field-matron service be strengthened and the field matrons equipped with

transportation facilities to enable them to perform their work effectively; that the Commissioner of Indian Affairs be urged to consider the advisability of making a good hard road out of the abandoned right of way of the Chicago, Burlington & Quincy Railroad in the western part of the reservation in cooperation with the county; that a strong suggestion for the enactment of compulsory school laws on this and other reservations be made to Congress; that an agricultural survey of the Crow Reservation to locate the dry farming lands now classed as grazing lands be made; that improvement leases, properly safeguarding the interest of the Indian allottees, be made to white farmers of the irrigated allotments in the Big Horn Valley. (See Appendix J.)

**PAPAGO RESERVATION, ARIZ.** (filed Apr. 9, 1918), by Commissioner Ayer, who particularly recommended that the agency house at San Xavier be immediately repaired and improved so as to make it habitable, and that two or three more wells be driven in the neighborhood of Tapowa and Piscinamo. This report is supplemental to one made by Commissioner Ayer a year ago. (See Appendix K.)

**PIMA RESERVATION, ARIZ.** (filed May 2, 1918), by Commissioner Ayer, who again urged the immediate construction of a lower diversion dam in the Gila River just above Sacaton; that a bridge be built across the Gila River at Sacaton; that a fully equipped playground be installed for the reservation boarding school, and that new suitable dormitories for this school be built or else the school abandoned entirely and a day school for the children living around the reservation be built; that two more field matrons be detailed to this reservation; that at this reservation, and all others, employees have small plots of ground allotted to them with free water for gardening purposes; that facilities for teaching woodworking to the older boys be provided. (See Appendix L.)

**MESCALERO RESERVATION, N. MEX.** (filed May 13, 1918), by Commissioner McDowell, who made the following recommendations: That a certain portion of their grass money be set aside each year to meet the emergency needs of the Indians for food, clothing, and agricultural purposes; that a portable engine and boiler of sufficient capacity be bought to make one of the sawmills available for local lumber needs; that a day school for small children and a community center for the women be provided for the Fort Sill Indians at White Tail; that a field matron, fully equipped and provided with a house and automobile, be detailed for the Mescalero Apaches; that the hospital be provided with an operating room, dispensary, maternity ward, and a separate dining room for the doctor and nurses and employees; that an additional thrashing outfit for the Carrizo and Tularosa districts be purchased and an additional farmer be authorized for the Carrizo district. (See Appendix M.)

**GREENVILLE JURISDICTION, CAL.** (filed June 5, 1918), by Commissioner McDowell, who recommended that the superintendent be relieved as much as possible of supervision of the boarding school so he can give more time to the pressing affairs of the agency, and that he be given sufficient clerical help and funds for agency purposes. (See Appendix N.)

**ROUND VALLEY JURISDICTION, CAL.** (filed June 5, 1918), by Commissioner Smiley, who made the following recommendations: That

when the 25-year trust period on the valley allotments in the Round Valley Reservation expires the Secretary of the Interior take such action as will release from all restrictions both the valley and upland allotments; that the Commissioner of Indian Affairs be requested to inquire into the advisability of changing the agency headquarters from Round Valley to a site on the Northwestern Pacific Railroad; that the Commissioner of Indian Affairs be requested to consider the suggestion that the old school plant in Round Valley be utilized for a home for the old and indigent, a hospital, and a demonstration farm for the benefit of all the Indians in the Round Valley jurisdiction; that a competent specialist in eye diseases be detailed to treat the nonreservation Indians for trachoma; that every effort be made to induce the county officials to admit nonreservation Indians to county institutions and that earnest efforts be continued to place Indian children in the public schools. (See Appendix O.)

CUSHMAN SCHOOL AND AGENCY, WASH. (filed June 26, 1918), by Commissioner Vaux, who recommended that at Cushman a printing office be provided, the School of Letters made a tenth-grade school, and as soon as is practicable a well-qualified principal be regularly appointed; that so long as both the Cushman and Salem schools are maintained mechanical training, particularly in the line of marine engineering, be emphasized at Cushman and agriculture be featured at Salem; that definite steps be taken by which Alaskan Indian children may better be looked after and protected upon their arrival in Seattle; that at Muckleshoot Reservation the field matron work be enlarged and carried further so as to take more of the form which has come to be generally recognized as "community center work." (See Appendix P.)

TULALIP SCHOOL AND AGENCY, WASH. (filed June 26, 1918), by Commissioner Vaux, who made the following recommendations: That in the heavily timbered country of the northwest cut-over lands be leased for not less than 8 or 10 years, with provisions in the leases requiring tenants to clear the land so that it will be suitable for agricultural purposes; that the Board of Indian Commissioners approve the action of the Indian Bureau in prohibiting pagan and other dances which have a degrading influence upon Indians, and that the prohibition of such proceedings be made even more positive; that careful inquiry be made into the best methods of suppressing the objectionable features of the Indian Shaker cult; that the superintendent of the Tulalip Agency be earnestly supported in his efforts to counteract pro-German influences directed against the loyalty of the Indians on the Lummi Reservation. (See Appendix Q.)

JURISDICTIONS IN WASHINGTON, OREGON, IDAHO, NEVADA, CALIFORNIA, AND ARIZONA (filed June 27, 1918), by Commissioner Ketcham, who made the following recommendations: That a comprehensive survey of moral conditions on Indian reservations be made by the board to provide the Secretary of the Interior with information on which he may, if he desires, base recommendations to Congress for legislation which will give superintendents the authority to prosecute and procure punishment for violations of marriage, divorce, and moral laws on reservations; that the Commissioner of Indian Affairs require superintendents annually to furnish Indians under their charge with a statement of the conditions of tribal lands and moneys, as shown

by the books in the Indian Office; that the boarding-school plant at Umatilla be made into a hospital; that the Commissioner of Indian Affairs take steps to obtain information which will lead to the arrest and conviction of unpunished murderers on the Coeur d'Alene Reservation; that the agency physician on this reservation be provided with a good home and adequate means of transportation; that a contract physician be provided for Grand Ronde. (See Appendix R.)

ST. REGIS RESERVATION, N. Y., by Commissioner Moorehead. This is a narrative report and carries no recommendations.

#### MARRIAGES AND DIVORCES.

The most important matter which we desire to bring to your attention and to urge that you give it earnest consideration is the increasing tendency toward moral laxity of the Indians on a number of reservations. There is urgent need of enforceable regulations, congressional legislation, or both, which will clothe superintendents with sufficient authority to arrest or cause the arrest and secure adequate punishment of offenders, both Indians and whites, against morality when the offenses are committed within the limits of reservations.

There is need, too, of an explicit definition of the extent and degree of authority delegated to superintendents by departmental regulation and legislation, Federal and State, in respect to marriages, divorces, and illicit sexual relations in the Indian country. We find there is confusion in the minds of a considerable number of superintendents in regard to their authority to procure arrest and punishment for violations of moral laws in the reservations under their control.

Somewhere along the line of Federal activities in the administration of Indian affairs, beginning with Congress and ending with superintendents, there is a defect which seriously weakens, if it does not entirely nullify, any authority there may be to punish offenders against the moral laws in Indian country. Just where the weakness, omission, neglect, or timidity is we do not know. We are strongly of the opinion, however, that the following are among the causes that contribute to the increase of immorality. The fact that State court decisions seem to be contradictory, the absence of specific Federal legislation, the confused state of mind of the men in the field as indicated by their wide divergence of opinions in respect to competent jurisdiction and authority, the disinclination of State and county officials to cooperate with superintendents because the county derives no revenue from nontaxpaying Indians, and the indifference of neighboring white communities to anything which is designed to advance the Indians on the way to civilization and citizenship.

On some reservations the Indians abide strictly by the State laws in respect to marriages and divorces. On other reservations in the same State the Indians pay no attention to such laws; men and women live together without any form of marriage—State or tribal; if married under the State law, husbands leave their wives and wives their husbands to live with other "husbands" and "wives" without ever thinking of legal divorces. The conditions on some reservations are becoming intolerable and unless they are quickly remedied all the constructive work of the missionaries and superintendents will be lost.

It is not necessary to name any particular reservation in this connection; the fact that there is a shameful looseness in morals and marriage relations among a number of Indian tribes is known to Members of Congress, the Indian Office, the Board of Indian Commissioners, missionaries, superintendents, and the Indians themselves. What is necessary is to give the Indian Office adequate authority to effectively fight this growing evil.

There are some who hold the view that Congress can not take jurisdiction itself in such cases. But, in other matters, Congress has not hesitated to authorize State courts to handle litigation in which full-blooded, restricted Indians are parties to the suit or case. Thus the act of May 27, 1908, provides that county courts in Oklahoma shall have jurisdiction in Indian probate cases. Another act gives county courts in Oklahoma the authority to find the heirs of full-blooded Indians and to partition the allotments of such Indians. The several Indian appropriation acts of recent years provided funds not only to pay the salaries of Indian Service probate attorneys but also all necessary court costs, etc. The antiliquor law, which is so drastic in its provisions that it enabled the Indian Office to change reservations which had been overrun with bootleggers into 100 per cent "bone-dry" territory, rests on the police power of Congress over Indian reservations.

The Indian appropriation act approved March 3, 1885, lists the seven specific crimes for which Indians can be tried in Federal courts. They are murder, manslaughter, rape, assault with intent to kill, arson, burglary, and larceny. But there seems to be no act or provision in any act which provides a way to punish adultery, seduction, illicit cohabitation, and like crimes committed by Indians or whites within Indian reservations.

We believe that much can be accomplished in the way of moral rehabilitation of those Indian reservations where moral laxity is on the increase if Congress would pass a law conferring jurisdiction on State courts to try cases arising from offenses against the moral laws on reservations. It will be necessary, if this is done, to make provisions for the payment of State court fees and charges as is done in the case of probate matters in Oklahoma. This act to be most effective should be so comprehensive in its scope and so drastic in its provisions that it would enable the Bureau of Indian Affairs to put an end to sexual immoralities, such as illicit cohabitation, adultery, and other open offenses of like character, and of the "secret" and pseudo-religious dances and ceremonies which cloak bestial practices and gross immoralities and which would be particularly severe in its punishment of white men who prey on Indian women.

#### RETURNED STUDENTS.

For two years the board has been conducting an inquiry into the record of Indian boys and girls who have returned to their homes from reservation and nonreservation schools. Our survey of this, the so-called returned-student problem, clearly developed the fact that while a number of these boys and girls are maintaining high standards and making good citizens and some have attained remarkable success, yet a considerable proportion of them fail to show progress after they return to their reservation homes.

Two special committees of the board are studying the problems connected, first, with the condition, conduct, and future of the non-reservation schools, and, second, with the more effective care and use of the students who return to the reservation after their school life. These committees will report during the coming year.

#### **DELINQUENCY.**

In the course of their inspections some members of the board have had their attention directed to juvenile delinquents. Under the laws of some States such boys and girls possibly could be sent to a State institution, but there is a disinclination on the part of State authorities to take in Indian juvenile delinquents. They contend that Indians are wards of the Federal Government and are not taxed, and therefore, State officials argue, the Government should take care of its juvenile delinquents. This board is studying the whole question of Indian juvenile delinquency to offer a practical solution of this problem.

Some provision for adult delinquents is also a vital necessity. We have found superintendents of isolated reservations, far removed from the offices of Federal attorneys and from Federal courts, seriously embarrassed in their efforts to preserve peace and good order on their reservations because, by reason of their isolation, they practically are without any effective police and court aid. If superintendents could be clothed with the powers of a committing magistrate with authority to sentence petty offenders to brief terms of incarceration in simple jails or guardhouses provided on reservations for that purpose, there would be a decided decrease in adult delinquency.

Against the argument that a superintendent who had the authority of a committing magistrate could abuse his power by taking personal revenge on some Indian is the fact that on some reservations the superintendent is openly defied by malfactors who know and boast that he has not the strong backing of legal authority in his efforts to maintain good order.

#### **EFFECT OF WAR ON THE SERVICE.**

The Indian Service has not escaped the disturbing influences of the war, for the bureau has lost many good men and women, some of whom were particularly well qualified for their work. A number entered the military service of the Government and others resigned to take up more lucrative employment in civil life. The Washington office and every school and agency are short-handed, with little prospect of any betterment in the conditions until after the close of the war.

The medical division of the bureau, in particular, is most seriously handicapped by reason of the loss of nearly one-third of its staff of surgeons and physicians. Almost all of the men who left enlisted in the Medical Department of the Army. Probably the loss of these medical men is the worst feature of the effect of the war on the Indian Service. At a pinch the Indians could get along for a time without farmers and teachers, but tuberculosis, trachoma, pneumonia, and infantile disorders must be promptly attended to.

The officials in charge of the Indian medical service have endeavored to meet the emergency caused by the depletion of the staff by making contracts with physicians residing in the neighborhood of Indian jurisdictions, by transferring Indian Service physicians from schools and agencies where local medical service could be secured to isolated reservations, and by raising the age limit for eligibility under civil-service regulations from 40 to 50 years. But notwithstanding these commendable efforts to provide sorely needed medical service for the Indians the situation continues to be serious, particularly in those localities where tuberculosis is prevalent.

Obviously the time is inopportune to suggest any immediate changes in policy or organization with the purpose of increasing the efficiency of the medical staff, but, with the end of the war, there undoubtedly will be changes, some of them radical and far-reaching, in every department of the Government, and it might be well to give some thought to the future of the medical division of the Indian Service. We have heard with much pleasure that the Indian Office is considering the probability of securing for the service a number of the young medical officers who will return to civil life from military hospitals, experienced surgeons of the highest type, who can be placed as head surgeons in the Indian hospitals.

But this hope may not be realized unless the salaries in the medical division are materially increased and the division reorganized so that it will be almost as independent in its functions and authority as is the United States Bureau of Public Health Service. We are of the opinion that there should be connected with the Indian Bureau a corps of surgeons and physicians having such independent authority that it could enforce quarantine and conduct a health campaign in the Indian country with or without the cooperation of the reservation or local civil officials.

The rate of progress toward civilization of the Indians is obviously affected by their health and living conditions. This fact has long been the center of one of Commissioner Sell's most aggressive activities, but he has been hindered in his "health drives" by an undermanned medical division, the lack of specially trained field matrons and nurses, and the indifference of the white neighbors of Indian centers to any effort put forth to help the wards of the Government.

#### INDIAN SOLDIERS.

Before the United States entered the war against Germany this board recommended the organization of a regiment of Indian scouts for patrol duty along the Mexican border. The entrance of this country into the great war inspired Indians to enlist and to-day there are thousands of Indian soldiers and sailors in the Army and Navy. It is estimated that considerably over 5,000 Indians have entered the military service of the Government. The lists of their students and graduates given publicity by the nonreservation schools show that the great majority voluntarily enlisted. These young Americans joined the colors not as a segregated unit but as individuals. They are scattered all through the service, and reports indicate they make good soldiers.

Indian mothers and sisters in every jurisdiction are active in Red Cross work. Indians have been liberal subscribers to Red Cross and

other funds. They have bought millions of dollars worth of Liberty bonds and are active in all enterprises related to the conduct of the war.

### THE NEW ACCOUNTING SYSTEM.

In compliance with an act approved May 18, 1916, the United States Bureau of Efficiency installed an accounting system for the United States Indian Service, which was put into effect July 1, 1917. The reason Congress directed that the Bureau of Efficiency should devise and install this new system of bookkeeping and accounting was that Congress wanted to have always at hand definite information concerning the cost of operation and management of every unit in the Indian Service. As an accounting system, pure and simple, the one now in use is, perhaps, beyond criticism. It covers every phase of the administration of Indian affairs except the most important of all—the human element.

The Indian Service is peculiar in that it has to do with the intimate personal affairs of tens of thousands of partly civilized people. The superintendent of a reservation, in the performance of his ordinary duties, must exercise the functions of a Government official having executive authority, a business man, agriculturist, administrator, counselor and educator, and should be a good friend and family adviser. To properly perform his multitudinous duties he should have ample time to go over his reservation and keep in close touch with his Indian people.

With few exceptions all superintendents are the special disbursing officers and custodians of the Government and of Indian property in their charge. They are under bond. The new system of accounting has developed this interesting situation: It has made accounts and reports of more importance than the welfare of the Indians. On many reservations the superintendents and their clerks are not expert bookkeepers and the year's experience under the new system has demonstrated the fact that it requires a high degree of accounting skill. This system calls for such a number and variety of reports and covers such a variety of intraunit transactions and, to the inexperienced superintendent and clerk, is so complicated that on many reservations the superintendent is tied to his desk until late in the evenings and frequently all day Sunday keeping books, using the time he should be attending to the personal needs of the Indians.

If every school and agency had a skilled bookkeeper as its fiscal agent and disbursing officer, under bond, there would be no excuse for bringing this matter to your attention, because, as we have said, the new accounting system as a system, pure and simple, is beyond criticism. But any bookkeeping system, any method of accounting, no matter how good it may be, makes for inefficiency if it takes up so much of the time of superintendents that they are not able to give to the Indians a close personal attention.

### MEETINGS.

The board held four meetings during the year; a special meeting at the home of Commissioner Ayer, Lake Geneva, Wis., July



25-27, 1917; the regular semiannual meeting at Lake Mohonk, N. Y., October 22-23, 1917; the annual meeting at Washington, January 29-30, 1918; and a special meeting at Portland, Oreg., April 8-11, 1918.

At the annual meeting Commissioner George Vaux, jr., of Philadelphia, Pa., was reelected chairman of the board, and Commissioner Malcolm McDowell, of Chicago, Ill., was reelected secretary, both for the ensuing year.

Commissioner Frank Knox, early in the war, enlisted in the military service after a course in the officers' training camp at Madison Barracks, N. Y. He was commissioned a major and is in command of the Second Battalion, Three hundred and third Ammunition Train, Seventy-eighth Division of the American Expeditionary Forces in France. Because of his foreign service it is not possible to secure his signature to the report.

#### **PURCHASE OF SUPPLIES.**

Chairman Vaux attended the lettings of contracts for supplies for the Indian Service at the Chicago warehouse. The abnormal business conditions caused by the war is making it more and more difficult for the Indian Office to meet the demands of schools and reservations for necessary supplies.

In a majority of lines there appeared to be a reluctance on the part of merchants, many of them old bidders, to enter into a year's contract to supply the needs of the Indian Service. This may be attributed almost entirely to the condition of the markets, the merchants not caring to quote prices unless they had the goods on hand or had every assurance of being able to get them. Because of the regulation of production by the Government, and the commandeering for the Army and Navy of existing supplies and future outputs of factories, mills, etc., the Service was considerably handicapped in covering its needs.

Notwithstanding this it was able to contract for a greater part of the essential supplies. Prices maintained an advance over the previous year, as was to be expected by reason of abnormal conditions. A noticeable reaction in prices, however, appeared in quotations on medical supplies which seemed to be caused by a readjustment of the upset conditions which existed when imports from certain foreign sources were stopped after war was declared by this country.

The board wishes to express its appreciation of the prompt response to the suggestion of Commissioner Ayer, made to you in March, that, if possible, substitutes for white flour, which had been purchased for the Indian Service under contract and practically all delivered long before the Food Administration regulations were promulgated, be used in the Indian schools.

The immediate cooperation of the Interior Department and the Indian Office provided ways and means by which a large quantity of white flour soon became available for the use of our allies.

During this year we have had the active cooperation, not only of the Indian Service men in Washington but in the field, and we

desire to express to you our appreciation of the many courtesies we have received from the Department of the Interior and the Bureau of Indian Affairs.

Faithfully, yours,

GEORGE VAUX, Jr., *Chairman*.  
MERRILL E. GATES.  
WARREN K. MOOREHEAD.  
SAMUEL A. ELIOT.  
EDWARD E. AYER.  
WILLIAM H. KETCHAM.  
DANIEL SMILEY.  
ISIDORE B. DOCKWEILER.  
MALCOLM McDOWELL.

To the SECRETARY OF THE INTERIOR.

## APPENDIX A.

### REPORT ON INDIAN LABOR IN ARIZONA, BY EDWARD E. AYER.

CHICAGO, ILL., *August 11, 1917.*

MY DEAR SIR: The rapid development of the long-fiber cotton industry in the Salt River Valley, Ariz., in the vicinity of Phoenix, where the recent crop survey shows 36,000 acres in this crop, opens a new and desirable field for Indian labor.

I understand that last season in this same section, where a cotton crop on about 8,000 acres was picked, that many Indians, especially Papagoes, were employed; that they gave good satisfaction to the cotton growers and received good pay for their work. A large number of additional pickers will be needed this year, and the Pima, Maricopa, Cocopa, and Yaqui Indians have shown themselves particularly adapted to this work.

I am advised by those in touch with the cotton situation that the various cotton growers' associations will guarantee the Indians good wages and general good treatment. What our Indians need most is to be taught to work. There are nearly 50,000 Indians in Arizona, and a very small percentage of them do any useful work. It seems to me that this opportunity for obtaining remunerative labor for a large body of the Indians of that section, at work which they can do, and with good pay, should be given prompt and favorable attention.

To accomplish this, in my judgment, a man should be detailed from the Indian Department to have charge of all Indians at work in the Valley; that is, to look after their interests; to see that they have proper tents, water, fuel, and other conveniences, as well as proper pay, and to advise them. There will be several hundred Indians from southern Arizona employed there this year. They will work for many different people, some of whom may only be interested in getting all they can out of the Indians and furnishing them as little as they can. This man should be sent there immediately in order to familiarize himself with conditions. He should put himself in communication with the different Indian agents in Arizona and try to get 25 or 30 Indians from each tribe to go to Phoenix and

make a trial there. They could be taught how to do the work by teachers from the Pima and Maricopa Tribes. Cotton picking begins about September 15 and continues for five or six months. They would therefore have steady work for at least five months, and many would find employment for the rest of the year. There will be about 7,000 pickers needed this year, and the number will increase rapidly from year to year. It is not hard work and can be done by men, women, and children, and so they could bring their families. The Navajo, Walapais, Apaches, etc., could all reach Phoenix by the Santa Fe Railroad and those from the south by the Southern Pacific. The whites, of course, would advance the money, if necessary, for railroad fare and start them with some provisions. Of course this is only a trial, but I feel certain that some would come again, and eventually—say in 10 years, or perhaps much less time, from now—the cotton growers of Arizona could depend upon help enough from this source to harvest their crop and the Indians be much benefited.

The man to oversee this work should spend the other seven months of the year among the different tribes of Arizona, New Mexico, and eastern California, advocating the work and arranging for the coming season. The ideal man for this work would be Mr. Thackery, but the Indian Department has among its splendid Indian agents a great many men who could do it.

Finally, the Government is vitally interested in this Arizona venture in long-staple cotton, as there will always be a shortage of it, because there is so small a section of the world where it can be grown.

Respectfully submitted.

EDWARD E. AYER.

HON. FRANKLIN K. LANE,  
*Secretary of the Interior.*

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## APPENDIX B.

### REPORT ON MENOMINEE INDIAN CATTLE, BY EDWARD E. AYER.

CHICAGO, ILL., December 7, 1917.

SIR: I desire to make the following recommendation in regard to placing cattle on the Menominee Indian Reservation. In January, 1914, I made the following recommendations in regard to placing cows on the reservation:

In the many thousand acres of land on this reservation there is an enormous amount of food for cows and young stock growing and going to waste every year. I think the reservation should be investigated with the view of starting a trial herd there of 1,000 head of cows, to be herded by the Indians with their ponies, and to be allowed to increase to the full extent, that hay could be cut in certain protected districts to get them through the winter. There is certainly enough food there for nine months of the year for several thousand head; and, at the price that cattle are now and always will be, there will be a large profit in turning off the 2 and the 3 year old steers each fall to be sent down, if not fat enough for beef, for feeders. It seems too bad, in the present condition of the meat supply of our country, that enormous districts like this should be allowed to go to waste.

I can not help but feel that it has been a great mistake that this recommendation was not carried out. The whole country was short

of beef at that time, has been growing shorter all the time, and with the great efforts being made by the Government for the last three years to make every bit of grazing land available, that this great tract should be left tenantless has certainly been a great mistake; and if this 1,000 head of cows had been put on the reservation at that time, the second bunch of 2-year-old steers would now be ready to be turned off and I will say that a grass-fed 2-year-old generally weighs from 800 to 900 pounds. I am paying now 10 cents a pound for just such feeders to put on my own farm. You would have to feed each head of cattle on the reservation a ton and a half of hay each year to carry them from the time the feed disappeared in the fall until it comes in the spring. I think it would be perfectly safe, even now, to start in the spring with 500 head of cows. I recommend 2-year-old Herefords from the Dakotas, fairly well-bred stock, and all with calf. They could easily provide next summer enough hay for wintering that many head.

The economical way of raising hay in that country would be to purchase two International 10-20 traction engines. Each one of these engines will haul three plows and, in putting in grain and seed, will run a 16-foot seeder, drag a roller about  $2\frac{1}{2}$  miles an hour. When it comes to mowing, they will run three mowers, cutting an 18-foot swathe at the same speed. All we would have to use teams for would be for stacking the hay and they could be brought in from the different Indians for that purpose or from the mills, being only at a very short distance.

Of course, there would have to be shelter for the winter and the places for grain and hay would have to be fenced. The shelters should be built in the immediate vicinity of the hay land. In fact, I think that the hay land we have there now at the farm would largely supply the hay for the first year.

With this report, I submit a map showing the condition of the grazing land and indicating two sections of 1,280 acres of land that could be plowed at any time, being prairie land of good soil for hay, and there is a great deal more of the same kind of land; in fact, there is hay land enough to winter any amount of steers that you would ever want up to several thousand head, which land is now going to waste.

In my judgment, it is utterly impossible for the Government to make use of this pasturage except with a tribal herd. An experienced cattle feeder, raiser, and grazer at the head, with the help of a few Indians, would do this work; but, as fully understood, there would not be one in ten who would keep his stock up or know how to take care of it if these cattle were scattered among the individual Indians. Of course, there is plenty of room, and as fast as the farmers would get the requisite knowledge small bunches could be turned over to them, if desired. Having the herd there would be an educational object lesson and would eventually be a great advantage to the tribe.

Respectfully submitted.

EDWARD E. AYER.

Hon. GEORGE VAUX, Jr., *Chairman.*

## APPENDIX C.

## REPORT ON INDIANS FOR FOREST RANGERS, BY EDWARD E. AYER.

CHICAGO, ILL., *December 10, 1917.*

SIR: I desire to make the following recommendation, which seems to me might relieve quite a number of capable men that could do better service for the Government in its present trials than they are doing now, and I think the Indians could be selected that would practically do the work of 75 per cent of the rangers in the employ of the Government.

I therefore recommend that there be selected from the different Indian tribes (I would suggest from those being well mounted) educated Indians up to the extent of 75 per cent of the men employed by the United States on park and wood ranges, and that they replace three-fourths of the white men in that service. I feel quite sure that they will do as good service as the whites do up to that number and under leadership of the strongest men among the whites.

In talking with Red Fox, Blackfoot interpreter, and other Indians, I suggested this, and he said he would certainly like to become one to enter this service and that Black Hawk, his chum, would be glad to be another. I thought it would be entirely practicable, and, of course, while I do not know how reliable these men are or whether or not they would make good rangers, these matters could be easily determined.

Respectfully submitted.

EDWARD E. AYER.

HON. GEORGE VAUX, JR., *Chairman.*

## APPENDIX D.

## REPORT ON THE CHOCTAWS IN MISSISSIPPI, BY WILLIAM H. KETCHAM.

DECEMBER 1, 1917.

SIR: I have the honor to report that I visited the Choctaw Indians of Tucker, Neshoba County, Miss., September 30-October 9, and two settlements in Leake County, October 10 and 11, 1917.

The bulk of the Mississippi Choctaws live adjacent to the towns of Tucker, Stratton, and Union, in Neshoba and Newton Counties; in fact, practically one-half live in Neshoba County. A number live in Leake, Scott, Kemper, and Attala Counties, and there are families scattered over various other portions of the State. It is claimed by some that there are to-day in the States of Mississippi and Louisiana about 1,700 full-blood Choctaw Indians. This claim may be very nearly correct. There can scarcely be less, and there may be more, than 1,000 full-blood Choctaws in Mississippi. Mr. John R. S. Reeves, special supervisor of the Indian Office, Washington, D. C., has made a valuable report on the Choctaws in Mississippi, particularly as regards their numbers and their land holdings. (See H. Doc. No. 1464.)

During my stay at Tucker I met a great many Indians, three to four hundred, most of them from the immediate neighborhood and from Stratton and Union, and some from Scott and Leake and other counties. I had an opportunity to observe them closely and to make careful inquiry into their condition. I visited a number of houses in the vicinity of Tucker which, despite extreme poverty, did not appear to be uncomfortable. They were clean and the occupants seemed to have the bare necessities of life, such as one might find in the cabins of very poor white people. The grounds around the houses were well kept and in some instances flowers were growing in profusion and there were evidences of gardening and farming on a small scale.

In Leake County I visited a number of families, some in the cotton patches, where they were at work, and others in the homes. The few houses visited were clean and well kept and would correspond to the homes of cleanly white people in very poor circumstances. Wherever I went I found Indians suffering from tuberculosis. I am convinced that these Indians, generally speaking, do not have sufficient food and that their meals are very irregular and by no means frequent.

#### GENERAL CONDITIONS.

I had visited Tucker the year before, and since that visit it seemed to me I could see an improvement in the dress of the men, particularly the young men. The majority were neat and made a good appearance; as for the women, they, generally speaking, were neatly but poorly clad. It is evident, however, that in many instances they do not have sufficient clothing to keep them comfortable during the cold weather.

The number of those who own land is so small that the question of landholding may be omitted from any survey made of these people.

They are in urgent need of medical attention and medicines. Very often the physician will not visit a sick Indian until an exorbitant fee has been paid or made secure in advance. The result is that those who are ill rarely have more than one visit of a physician and many can have no attention whatever. This condition applies to the druggist and medicines required by the sick. The sick usually have to depend on the uncertain charity of white people for proper food, medicines, and medical attention.

The Choctaws of Mississippi have a very good name as regards honesty, truthfulness, cleanliness, and general morality. They are in a sense industrious yet inconstant and unthrifty.

In many instances they still marry according to Indian custom and the old ideas concerning marriage are much in evidence. Men and wife frequently separate and contract new relations. The fee for the marriage license required by the State of Mississippi is partially responsible for marriages in Indian fashion, but there are a number of Indians who have not accepted Christianity and who still prefer the old customs. Although the Christian Indians are well informed on Christian ideas concerning marriage, they now and then fall into the habits of their non-Christian relatives and friends. Apart from this, probably, as regards morals, the Mississippi Choctaws are superior to many Indian tribes and to many white people.

## INDIANS ENGAGED IN FARMING.

The Mississippi Choctaws realize that they must earn their bread by the sweat of the brow. They seem willing to work and there are certain things they can do particularly well. They are adepts with the shovel and ax, and understand the growing of cotton; the women appear to be capable of doing well the work that women are accustomed to do. The chief fault of the men is that they too easily take a day off and permit trifles to interrupt them in their work. For this reason they are not successful as day laborers for concerns that require their employees to begin work at a certain hour and to put in a fixed number of hours a day and a fixed number of days per week.

For the work they are accustomed to do they receive very small compensation and they are practically helpless in the event that their employer chooses to cheat them or to impose on them. This holds true in the growing of crops on shares; in fact, in everything they do. It is the white man who keeps the accounts and who dictates the settlements; and some white men are honest and some are not, and because of his nature and the conditions of society in which he lives, the Indian is practically without any redress and has no one to whom to appeal when he is browbeaten and cheated; hence he is practically a peon in the make-up of Mississippi society.

Whatever the Indian needs for farming must be supplied by the landlord and on the landlord's terms. If he could remain on his farm and work it properly, if he could be assured a square deal on the part of the landlord, and, finally, if he could break away from Indian custom so far as to refuse to divide with the improvident what he lays up over and above his needs of the moment, he could make a living and take care of himself. Usually, however, he has to neglect his farm, now and then, to get a day's labor somewhere in order to earn the necessary cash for a few day's actual living expenses, and such interruptions account largely for his failure to reap a normal harvest. Hence (a) he needs some one to stand between him and the unscrupulous employer; (b) he should receive aid from the Government for one or two years; and (c) means must be devised to educate him up to the point of ignoring such Indian customs as result in the indolent living off the thrift of the industrious.

## LACK OF EDUCATIONAL FACILITIES.

As to education, most Mississippi Choctaws do not appear to have even the rudiments of an English education, and yet, remarkable as it may seem, a great many can read and write the Choctaw language. All, without exception, speak the Choctaw language, and, while a number of the older people speak English after a fashion and understand it for ordinary purposes, the majority, particularly the women, seem loath to make use of it—the result, no doubt, of bashfulness and a certain indolence, it being easier to use the language that comes to them naturally than to exert themselves to master the white man's speech.

As for schools, while it is true that they have not many opportunities in this regard, it is just as true that they fail to make use of

the opportunities they have. The Mississippi Choctaws would not wish to send their children away from home to boarding schools and they do not send them regularly to the day schools. In the day school conducted by the Catholic Church at Tucker there is an enrollment of 40 and an average attendance of 10. It is a matter of note that in Oklahoma the removed Mississippi Choctaws are loath to send their children to boarding schools and are irregular in sending them to the day schools.

In fact, it is a question as to whether it would be advisable for these children to be educated in a boarding school. In the boarding school they would learn more and be better cared for, but they would become accustomed to conditions and to comforts they can never enjoy when they return home, and this would tend to make them dissatisfied and unfit them for life amid conditions they must necessarily face. Mississippi offers few or no opportunities for an educated Indian. Such an Indian probably could find no suitable employment of any kind. In Mississippi if the Indian does not wish to associate with the negro (and experience proves that he does not) he must live exclusively with his own people. There are certain kinds of manual work open to him, but, generally speaking, it is on the farm that he must earn his daily bread.

#### BOARDING SCHOOL UNDESIRABLE.

Having talked this matter over very carefully with well-meaning people and with the older Indians, I advise strongly against the establishing of a boarding school for these people. If there are certain individuals found here and there who desire a higher education they can be sent to Carlisle or other similar schools and later they may be able to make use of their education somewhere in the North or West, or they might go back to their people as teachers. I am not prepared, however, to advocate a measure which, if it prove a success, must necessarily mean that the Indian will have to leave his native country (and the Choctaw is religiously attached to his native Mississippi) and become an exile among strangers.

As for attendance at day school, this should be compulsory if it be possible to make it so, but it should not be compulsory so long as the child and the parent are underfed and not comfortably clothed, and so long as parents at times really have need of the services of their children at home; so long, in fact, as the problem of supplying a half-starved people with sufficient food remains unsolved and adequate means for the conservation of their health are unprovided.

Everyone with whom I talked on the subject at once said that it would be folly to distribute cash payments among these Indians; that in two days every cent would be in the hands of the whites.

If the Indian were given land, probably he would not be able to maintain his ownership of it unless trained to this by some sort of supervision. The question of taxpaying seems to have been the bane of the Mississippi Choctaw. An old Indian said to me that formerly he owned a number of horses but that the white authorities took all his horses away from him, and he found out afterwards this was done because the State had placed a tax on horses. I asked another Indian if he would like for the Government to give him a team of mules, and



he said no, he would have to pay tax on the mules, and he would lose them, and also that the mules would have to be fed, and this would be an additional expense to him. He thought he could make out better by farming with a hoe, because the hoe did not eat and would not be taxed.

#### RECOMMENDATIONS.

I am not prepared to advocate a reservation for these people, because the day of the reservation would seem to have passed. The reservation, in the course of time, would be broken up and allotted, and 25 or 30 years from now the Indians would be in the same condition they are at present. Under the circumstances I think the best that can be done for them is to help them get on their feet and guide their steps until they can walk alone.

I therefore recommend—

1. A special agent for the Indians living within the boundaries of the State of Mississippi, with headquarters at Tucker or Stratton or Union, whose duty it will be to visit the Indians throughout the State, inquire into their needs, advise them, and stand between them and the rapacity of the white man. The agent should supervise their agreements with individual whites, procure employment for them, and see that they receive their wages.

2. A doctor, located at one of the above-mentioned places, who could be relied on to visit the Indians gratis in case of need. Medicine should be supplied gratis.

3. A field matron, located at one of the above-mentioned villages, to look after the sick, visit the homes, and give advice to the women in all matters pertaining to cleanliness and health. The agent, doctor, and matron should be supplied with facilities for transportation.

4. Under the supervision of the agent the Indians should lease farming lands, and the Government should supply them with implements, necessary stock, and means of subsistence for one or two years. The Indians should not be allowed to give away, sell, or mortgage anything that has been furnished them by the Government. They will need subsistence so that they can devote their entire attention to the growing of their crops. Probably at the beginning of the second or third year they may be able to sustain themselves and provide their own seed. Whenever it is feasible and advisable to do so the agent should make arrangements for individuals to purchase on easy yearly payments the lands they occupy. Under his careful supervision the Indians might be able, in the course of time, to acquire title to the lands they occupy, and if they thus succeed in purchasing their lands it is possible that in the future they will understand how to meet the obligation of taxpaying.

5. As for schools, for the present, the Government should assist the day schools that are now in operation and provide new ones in localities where a sufficient number of families is located. The agent and the field matron may devise some plan whereby the Indians will be induced to send their children to school regularly.

6. It would be good policy for the Government to establish an experimental farm near the center of Indian population.

7. It would be advisable, as a matter of economy, that a physician be appointed as the first special agent and the office of agent and

physician united. It is not at all unlikely that, within a couple of years, an active, conscientious agent will be able to induce the majority of the scattered Indians to remove nearer the center of the Indian population. This would simplify the work and reduce expenses.

In conclusion, while the treatment the Indians of Mississippi have received at the hands of certain unscrupulous persons can not be too severely condemned, it is only just to say that many citizens of the State take a very kindly interest in the Choctaws and but for the assistance that has been rendered them year after year by many white people the race long since would have perished entirely.

Respectfully submitted.

WILLIAM H. KETCHAM.

HON. GEORGE VAUX, Jr., *Chairman.*

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## APPENDIX E.

### REPORT ON THE HEALTH DRIVE IN OKLAHOMA, BY WILLIAM H. KETCHAM.

WASHINGTON, D. C., *January 1, 1918.*

SIR: I have the honor to report as follows on certain activities in connection with the efforts that are being made by the Indian Bureau to improve health conditions among the Choctaws and Cherokees of Oklahoma.

The Commissioner of Indian Affairs, having determined on the inaugurating of a "health drive" among the Choctaws and also among the Cherokees, appointed six field matrons for the Choctaw country, to work under the supervision of Dr. W. W. Van Cleave and Mrs. Elsie E. Newton, and five matrons for the Cherokee country, to work under Dr. R. E. L. Newberne and Mrs. Wilma Rhodes. The matrons were instructed to visit every family, to make a detailed survey of health conditions and incidentally to gather in such relevant information as could be obtained. The Choctaw matrons began their work on July 5 and the Cherokee matrons on August 3.

In the meantime the commissioner had the Indian Office pamphlet "Indian Babies: How to Keep Them Well," translated into the Cherokee language and printed and circulated. I believe the Indian Office pamphlet "Tuberculosis Among the Indians" is also to be translated into Cherokee. For the translating of these pamphlets into Choctaw the commissioner appointed Peter J. Hudson, the Choctaw tribal interpreter, and the Board of Indian Commissioners delegated me to cooperate with Mr. Hudson in this work, which was done for the most part in McAlester and in Oklahoma City, in a period of about three weeks. I did much of the proof reading after my return to Washington. The pamphlets in Choctaw have been printed and circulated extensively and I am informed that they have been very favorably received by the Choctaw-speaking people.

The Commissioner of Indian Affairs visited Muskogee in the interest of the "health drive." Everyone associated with the movement was called into Muskogee. I was invited to be present and spent

August 16 and 17 in attendance on the meetings which the commissioner held. These meetings, at which were present most of the employees of the Five Civilized Tribes Superintendency, were profitable and enlightening. The physicians and matrons gave an excellent account of themselves. The information they produced revealed a far more serious condition than my report had indicated. Commissioner Sells, thoroughly alive to the situation, imparted his enthusiasm to his audiences and aroused a local interest in the drive. At the request of Mrs. Newton, I visited Antlers, Idabel, and Broken Bow to inquire into the work the matrons were doing in these sections. Invitations to visit other localities I had to decline for lack of time. I was most favorably impressed by what I saw. The work everywhere was being pushed zealously and intelligently and the people were responding accordingly. Nothing that has as yet been done for the Choctaws has met with so much approval and applause not only from the Indians, but from the white people, as has this work in the interest of health. Of course, there are those, both Indian and white, who criticized and voiced objections; however, no effort put forth for Indian welfare has been so popular with the people generally as has this.

The drive brought to light, among other things, proof positive of the contention I have been making for some time that a large number of Choctaw children have been attending no school whatever. The general estimate of the "health drive" is very aptly expressed in the following words of the principal chief of the Choctaw Nation:

Of all things instituted for the good of our people the "health drive" has been of more real benefit than all others put forth in their behalf. Somehow we feel the good effects of this work more than that of any other branch of the service. The work of Mrs. Newton and her corps of good, earnest women is accomplishing great good. Mrs. Peters in this district has won the friendship of our people, and I say here, without reservation, that she has done more real personal good for the Choctaws than anyone else ever sent down here for their instruction and betterment. [Mrs. Peters had charge of the Antlers district. The same could be said of Mrs. Lewis of Broken Bow, of Mrs. Grommett of Idabel, and of every other matron in the service.] I hope you will support the "health drive" among the Choctaws, and, if possible, make it a permanent institution.

It is a calamity that the Commissioner of Indian Affairs did not have at his disposal sufficient funds to make the work of the matrons, which is now discontinued, permanent. At the present time there is not a single matron in the field to continue the work so auspiciously begun.

#### RECOMMENDATIONS.

1. I recommend that every effort be put forth by the board to assist the commissioner in obtaining from Congress an appropriation that will enable him to establish a permanent organization for health work among the Choctaws and Cherokees, and, furthermore, to inaugurate similar work for other tribes among which tuberculosis is prevalent.

2. I again call attention to my recommendations in regard to the Talihina Sanitarium. Despite the intelligent efforts of those in charge, the sanitarium is not reaching the people and is not accomplishing what it should, and never will, until (a) a Choctaw-speak-

ing official of some sort is connected with the institution, (b) cottages or tents are put up for accommodation of the older patients, and (c) the aid of the State is obtained in compelling such Indians as are a menace to those among whom they live to remove to the sanitarium and remain there until such time as they may be permitted by the authorities of the hospital to return to their homes.

3. I recommend that the pamphlets above mentioned, and particularly the pamphlet on tuberculosis, be translated, as soon as possible, into the languages of such tribes as are accustomed to read their own language, and that they be distributed among them and systemically read to them at church and school and other gatherings.

Respectfully submitted.

WILLIAM H. KETCHAM.

Hon. GEORGE VAUX, Jr., *Chairman.*

## APPENDIX F.

### REPORT ON THE BLACKFEET RESERVATION, MONT., BY MALCOLM McDOWELL.

WASHINGTON, D. C., *November 21, 1918.*

SIR: Pursuant to a resolution of the Board of Indian Commissioners I made a survey of conditions on the Blackfeet Indian Reservation in northwestern Montana, arriving at Browning, where the agency headquarters are located, September 7, 1917, and remaining on the jurisdiction until September 20, or 13 days.

The outstanding impression made by the survey is the atmosphere of optimism which pervades the Blackfeet Reservation, and this notwithstanding some conditions which can and ought to be remedied and some situations which should be cleared up. There is an air of animation, a sense of progress, and a feeling of hope in that Indian community which were so contrary to reports that, for a time, I feared my judgment was warped by the strong liking I formed for the Blackfeet almost immediately on my arrival on the reserve.

Just as cotton promises to solve the economic problems of the Pima, Papagos, and other Indians in southern Arizona, so hay promises to establish the Blackfeet Indians on a sound, progressive basis. In 1915, as the records show, the full-blood Blackfeet produced about \$9,000 worth of hay, an average of about \$30 to the family. Last year—1916—these full-blood families sold about \$28,000 worth of hay, or \$86 to the family, and this year they have produced over \$55,000, or an average of \$193 to the family.

#### A CATTLE COUNTRY.

This reservation covers an area approximately 50 by 60 miles in the northwestern section of Montana abutting Glacier National Park, which lies to the west. It is essentially a cattle grazing country and parts of it are well adapted to sheep raising. Although there is scarcely a month in the year, so I was told, in which there is not frost, the hardy grains and vegetables grow well and with anything like a moderate amount of precipitation the native grass covers the land

with its cattle-fattening green. This grass cures on the land, making first-class cattle food. Timothy grows well and some alfalfa and flax are grown on the river bottoms and in the irrigated areas.

Most of the progressive mixed breeds are grouped in the northern part of the reservation, while the majority of the full bloods live along the creeks and streams which flow from the Rocky Mountains in the southern and western sections. The mixed breeds who have gone into the cattle business, and there are a number of them, have made marked successes. Some of them carry large lines of credit with banks. It was intimated to me that some of the mixed breeds really were but the agents of bankers and capitalists, who went through the form of loaning money to conceal the fact that the Indians did not own the cattle they ran, the outside moneyed men thus being able to run thousands of head of cattle on Indian land without making adequate payment for the privileged.

But I was unable to locate one single fact to bear out the intimation and all of the agency officials declared there was nothing to the report. The prosperous condition of the ranches and ranch homes of the mixed-breed cattlemen, their industry and activity, their talk, bearing, and other evidences of self-respect and independence, were so marked that it seemed plainly evident they are cattle owners though they may be heavy borrowers from banks.

There has not been the best of feeling between the mixed bloods and their full-blood brothers, but in this respect the Blackfeet are not unique—such a condition is common to many tribes. There are two factions on the reservation and much bitterness of feeling caused strained relations and made it difficult to get the tribe together on any constructive policy. But one of the main differences has practically been removed, for the sentiment in favor of selling the Ten Mile Strip is virtually unanimous and apparently the proposition is agreeable to the tribe, the Indian Office, and Congress.

#### THE TEN MILE STRIP.

Along the east end of the reservation is the Ten Mile Strip, which has long been a bone of contention on the reservation and in Congress. It is proposed to sell the unallotted surplus land in this section, the proceeds to be used to purchase cattle for the Indians. This matter has been before Congress (Senator Walsh has a bill pending) and the department a number of times, but in the early part of this year all parties concerned got together and now it is agreed that it will be a good thing to sell this land provided the money is used to set the Indians up in the cattle business.

If the Walsh bill is enacted and the land in the strip sold the real problem will be the intelligent distribution and disposition of the purchased cattle. It certainly would not be wise to distribute cattle, pro rata, among the full-blood Indians with the expectation that every family would use its issue to start a herd and make a success of the venture. There should be an intelligent discrimination exercised in issuing the cattle, for about one-third of the 300 and more full-blood families is incapable of handling cattle.

This group is made up of the old, sick, disabled, and unprogressive Indians, many of them on the ration rolls. Another group,

comprising about a third of the full bloods, is made up of Indians who, under supervision, probably would be able to care for cattle properly, and the balance of the full bloods, about a third of all, not only are experienced cattle people but are, or would be, equipped with barns, corrals, feed lots, hay, etc.

Supt. Thomas Ferris, who before becoming superintendent of the reservation, was its stock supervisor for some years, and to whom the Indians and white men in that country give most of the credit for the progress recently made by the Blackfeet, sketched out his plan for distributing the cattle should steers and cows be bought for the Indians. He first would turn all the cattle into the tribal herd and issue from it. To the Indians who are fully competent to raise and care for cattle he would issue forthwith; to those who are capable but who have not shown their capability or who are not prepared with sufficient equipment he would issue only after such Indians had built barns, feed lots, etc., and had sufficient hay in stacks for the first winter's feeding, and then he would keep a supervising eye on them, teach and encourage them until they had graduated from the probationers' class. The cattle for the old, infirm, disabled, and hopelessly unprogressive he would keep in the tribal herd, branding them with the Indians' private brands, and giving the owners the proceeds from the increase. Some of the full bloods would want sheep or horses instead of cattle; others would prefer cash to be used to purchase building material for homes, farm implements, and automobiles.

#### THE TRIBAL HERD.

Two years ago—1915—the Government bought for a tribal herd 1,800 heifers, of which 1,200 were 2-year-olds and 600 were yearlings; in 1916 the herd was increased by the purchase of 700 heifers, and the first calf crop numbered 900. The calf crop this year—1917—will run from 1,100 to 1,200. Exclusive of 115 bulls and this year's calves the tribal herd now numbers about 4,300, and the stock account shows that up to July 1 of this year there has been a net profit on the tribal herd, above labor and hay, of 20 per cent.

From what I saw and learned the herd is in good condition; the cattle certainly were a good-looking bunch of healthy beef animals, fat and sleek.

The full bloods did not seem much interested in the herd. They spoke of it in an impersonal way, as though it belonged to some one who did not live on the reservation; apparently they did not have the sense of ownership. Undoubtedly the herd is a success as a tribal investment, but as an object lesson in stock raising, as an incentive to induce full bloods to attempt stock raising, and as an exhibit in teaching the principles of the live-stock industry to the full bloods, I could not exactly see where it came in.

To me its great value rested on the fact that it provides a spot-cash market for the hay of full-blood Indians. It was the lever which Supt. Ferris used to pry these Indians from their settled habits of indifference, and, entirely apart from its value as a tribal asset or as an object lesson, the tribal herd has been a big in-

fluence for good, in that it has placed something over \$40,000 of real earned money into the pocket of full-blood Indian haymakers this year.

#### AGENCY LIVING CONDITIONS.

For a number of years the Blackfeet Agency has suffered from frequent changes in its staff. Superintendents are short lived on this jurisdiction, for in the last 10 years there have been six of them. When Commissioner Sells took hold of the Indian Office he found the Blackfeet Reservation one of the worst "situations" in the service and was compelled to make almost a clean sweep, from the superintendent down, of the agency force to remedy conditions. But before and since then the frequent changes, through transfer and other ways, have been the subject of adverse comment in the service.

One cause of these changes is the poor living conditions of the superintendent and employees. Frankly I was shocked when I made a tour of the quarters of the agency staff. I could find nothing attractive in or around their homes. Rather I saw much which was unlovely, unhealthy, insanitary, and unexplainable. The group of agency home buildings consist of a dwelling for the superintendent, three double houses for married employees, and rooms in the agency administrative building for unmarried male employees. All buildings are old; all need paint and many repairs. There is not a bathtub in the place, and the only source of drinking water is a broken pump on the back porch of the superintendent's house. All employees must pack water from that pump. Some of them, to save steps, draw water for laundry and house-cleaning uses from the creek which runs through the ground and in which I saw the swollen bodies of a dog, a pig, and a cat.

I was told it was most difficult to heat the houses, and the thermometer falls to 40 and 50 below in that winter climate. Old-fashioned kerosene lamps are the home lights. There are no sewers or anything approaching a sewer. Water can be found anywhere from 2 to 4 feet below the surface. In short, the agency is located on water-logged land. Much of the furniture is homemade, and the quarters, as a whole, are poorly furnished. In the winter months isolation adds its depressing effects to the inadequately heated homes, and the lack of cheerfulness emphasizes the unattractive living conditions. It is small wonder that Indian Service employees seek transfers from the Blackfeet Reservation.

The little town of Browning, in which the agency is located, is 2 miles from the Great Northern Railroad. I was told that many years ago the agency was located there, before there was a town or a railroad, because of the little brook which waterlogs the agency grounds. I could see no good reason why the agency should remain where it is, 2 miles from the railroad, where the ground lies higher and where the agency should be located.

Granting that this change would cost a fair amount of money, the Government has no right to impose such living conditions on its employees. That country was set apart for the Blackfeet Indians, the reservation was established, and a superintendent and employees are necessary so long as the reservation is continued. They do not require luxurious quarters, but are entitled to decent homes and decent furnishings.

I know of no other branch of governmental activities whose employees, as a whole, are so poorly housed, so inadequately supplied with creature comforts, as the Indian Service. In the course of my work I have happened on the permanent and field quarters of the Reclamation Service, the National Park Service, the Forest Service, the Agricultural Department, the War and Navy Departments, and other departments, bureaus, and services of the Government, and in almost every case I found them superior in every way to the general run of quarters on the average Indian reservation. On some reservations the living conditions of the employees of the agency are good, but on those same reservations I saw the men and women in charge of the little day schools living in houses entirely unfit for white people. On the Blackfeet Reservation this situation is reversed, for the homes for the teachers of the two day schools are new, rather attractive, and better than any building at the agency.

I would suggest, therefore, that consideration be given, by the proper authorities, to the moving of the agency to the railroad or else to a complete renovation of the agency buildings, the installation of lighting and septic sewage systems, the better furnishing of all quarters, the installation of a water system, and a new building for the unmarried employees.

#### INDIANS WANT SCHOOLS.

Although there are 3 Government schools and 1 mission school on the reservation and 18 public schools on and near the reservation, which Indian children attend, the school facilities are inadequate. A heartening evidence of the spirit of progress which seems to be animating the Indians was the earnest request of a number of full bloods for a day school in the Cutbank district and a larger building for the public school at Browning. Indians move to Browning in the late fall so their children may attend the public school there.

This school uses two buildings; one built and owned by the State of Montana and the other by the Government. It has an attendance, at times, of over 150, of which all but a dozen or less are Indian children. The Indians attend the school under a contract by which from 15 to 30 cents a day are paid the State for tuition. The State apportions about \$4,500 a year for the school, which last year had an average of but 9 white children in attendance, a striking testimony to the broadmindedness and progressive character of the Montana educators.

Prof. W. H. Watson, now living at Spokane, Wash., was superintendent of the public schools on the reservation for a number of years up to last year. He happened to be at Browning while I was there and said this about the Blackfeet Indian children:

They are brighter than the average. They learn quickly and most of them are enthusiastic scholars. Of late years their parents have cooperated with us heartily. They want their children educated. The public school at Browning is altogether too small. A large, modern building should be erected to care for double the number of children. There would be no difficulty in filling the school to this increased capacity. As the great bulk of the attendance comes from Indian children the Government should build a new school structure. It can be erected for a few thousand dollars, and no money could be spent more wisely or with more certainty of immediate good results. Now is the time to act in this matter, for the school is crowded far beyond its capacity.



## THE BOARDING SCHOOL.

The reservation boarding school is 6 miles north of Browning, on the Cutbank River. It has a capacity of 144, which should be increased to 250 at least. The school was not open when I was there. Mr. W. C. Germain, the new principal, arrived but a few days before and faced the situation which was common to all reservation schools—a shortage of teachers, matrons, and other essential members of his staff. The war has opened up opportunities which the underpaid employees of Indian schools are eagerly seeking. Men and women in the Indian school service, whose salaries range from \$40 to \$75 a month, have discovered they can go to almost any town within easy reach and get positions with much better living conditions and which pay from two to three times what the Government pays. If the war continues much longer there is danger that the Indian school service will lose the best of its principals, teachers, matrons, disciplinarians, mechanics, farmers, and other members of school staffs. There is but one way to prevent this—an increase of pay and the bettering of living conditions.

The reservation boarding school has a good-looking herd of Holstein cows, which is housed in a log shack. The incongruity of attempting to teach boys the elements of scientific dairying with a number of fine-bred cattle which are sheltered in a thing misnamed a barn is too obvious to be suggested. Either the cows should be turned loose and the children given canned milk or a decent barn should be built and that at once.

The dormitories, school buildings, employees' houses, and other structures, except the cow barn, seemed to be of a substantial character, but all of them were sorely in need of necessary repairs. The main buildings were of brick, which was made on the ground. I was not at all favorably impressed with the appearance of the plant, which had been allowed to run down, but I was pleased with the manner with which Mr. Germain took hold of the situation. He seemed to understand his problem and if he is supported by the reservation authorities I believe he will do much to improve conditions and bring about harmony in the school staff.

The Old Agency day school, 22 miles southeast, and the Heart Butte day school, 35 miles south of Browning, are housed in new buildings, but the Heart Butte school should have a well, for water now is taken from a creek below a cattle-feeding lot. Thirty children attend the Heart Butte school and 37 the Old Agency school, all of them full bloods. I was told some of the children came from a distance of from 3 to 5 miles, even in the severest winter weather.

The Holy Family Mission (Catholic) boarding school for boys and girls has an average enrollment of 78. I went over this school with Supervisor Wilson and found the plant in good shape and all the irrigated land under cultivation.

There are from 250 to 300 full-blood children who can not be taught simply because there are not enough school facilities. All children could attend school if a day school were opened in the Cutbank district, the boarding-school capacity increased, and the Browning day school enlarged.

## HEALTH CONDITIONS.

The deplorable health conditions of the full-blood Indians caused Commissioner Sells to start a health drive on the reservation in April, 1916. The campaign was in charge of Dr. C. H. Dewey, an eye specialist, and Mrs. Elsie E. Newton, at that time supervisor of field matrons. The campaign lasted about four months, and just as it was achieving good results the lack of funds brought it to a close. The Heart Butte district, which is entirely a full-blood community, was the center of attack, and Dr. Dewey, assisted by his nurse, Miss Soper, held daily clinics in hospital tents. Mrs. Newton, with two assistant field matrons, made a house-to-house canvass. The party lived in sheep wagons, moving from place to place. Mrs. Newton's force canvassed the homes, induced the Indian women to clean their houses, had houses whitewashed, had roofs repaired and windows put in, and suggested other improvements and repairs. The sick were visited and so many unreported cases of tuberculosis were found that the reservation sanatorium was soon filled to its capacity.

It was found that fully 75 per cent of the homes of full bloods were in bad shape, some of them were in such condition that the houses were pulled down and the families moved elsewhere. The policy was adopted of having the Indians cut and dress logs for building and repairing cabins and in other ways helping on the work. The Indians had no money or resources which could be used for repairs and it was necessary to use the \$5,000 which was placed in the hands of the superintendent for the purpose, making many of the homes habitable.

In addition to this work face towels were distributed, two for each member of the family, for the common towel is the most effective agency for spreading trachoma. Dr. Dewey examined over 1,800 Indians for trachoma during the campaign, and the result of the good work done by him and Mrs. Newton and their assistants was noticeable when I went over the ground covered by them.

## FIELD MATRON SERVICE.

There was but one field matron on the reservation when I was there, Mrs. Sara D. Wilbur, who had an assistant, Miss Hazel Whitcomb, stationed at Old Agency. Mrs. Wilbur lives in a rented house in Browning, which though comfortable as a home is not adapted to her very important work. Every day many Indian women come to her and the little cottage is filled to overflowing. She seems, in all respects, to be well qualified for the position she fills, but the reservation is so large and the Indian families so scattered that with her limited means of transportation she can cover very little ground. She should have more help. She should have office room where she could take care of her charges; she should have an automobile, which would increase her efficiency ten times. There should be a field matron in the Heart Butte district and another in the Cutbank district. In short, the field matron service on the Blackfoot Reservation should be enlarged, strengthened, properly equipped, and

enthusiastically encouraged by the reservation officials. Unless this is done all of the good work of Dr. Dewey and Mrs. Newton, and all the energy, time, and money put into their campaign will be dissipated.

The reservation hospital stands on one of the most lonesome spots in that country. It is within a mile and a half of the little railroad station of Blackfoot, 9 miles from Browning. Blackfoot has a population varying from 35 to 50 people. I was unable to learn why the hospital had been located in such an out-of-the-way, unattractive place, except that the location was made to suit the whim of the superintendent of the reservation several years ago. For some reason the hospital is not popular with the Blackfoot Indians.

So far as I could see it was of the standard type of the Indian Service sanatoria and seemed to be fairly clean. Since my return to Washington I find there has been a complete change in the staff, and this may overcome the prejudice of the Indians.

#### INDIANS BELITTLE IRRIGATION.

Less than 2,000 of the 28,000 acres of irrigated land now within service of ditches are cultivated by the Blackfeet Indians, and most of this acreage is made up of little patches along the rivers and creeks. It is doubtful if the area of irrigated land which has been seeded and cultivated would aggregate more than one-half of the acreage reported. If the irrigation system had but recently been placed in operation there would be no particular significance in the paltry showing made by the Indians, but this area has been ready for the plow for a number of years, and the fact that but a mere handful of Blackfeet are attempting to utilize the water is an indication of the almost utter indifference of the Indians as a whole toward farming their watered allotments.

Over a million dollars has been spent by the Reclamation Service on the several Blackfeet irrigation projects, and the service engineers estimate that \$2,800,000 additional will be required before all of the irrigable land has been brought under ditch.

A large part of the land subject to irrigation lies in the Ten Mile Strip, which, in all probability, will be opened for settlement within a few years. The allotments in the area now under ditch are in 40-acre tracts. If the strip is opened, white settlers probably will first take up the unallotted irrigable lands. This will raise the question of leasing or selling, for the benefit of the Indians, the 40-acre allotments. Whatever may have been the original purpose in the plans underlying the several irrigation projects on the Blackfoot Reservation, it is evident the purpose, so far as making irrigation farmers out of the Indians is concerned, has gone astray.

Respectfully submitted.

MALCOLM McDOWELL.

HON. GEORGE VAUX, Jr., *Chairman.*

## APPENDIX G.

## REPORT ON THE ROCKY BOY'S BAND, MONTANA, BY MALCOLM McDOWELL.

WASHINGTON, D. C., *February 2, 1918.*

SIR: On my way from the Blackfoot Indian Reservation, in north-western Montana, to the Crow Indian Reservation, in southern Montana, I made a slight detour to visit Rocky Boy's Band of Indians, who recently have been placed on a reservation which occupies three townships of the abandoned Assiniboine Military Reservation, in Hill County, Mont. Rocky Boy's Band, so called because Rocky Boy, a Chippewa Indian, who died last year, was the chief, is a group of nomads who, for many years, wandered about the State of Montana.

About 50 years ago some Chippewas from Wisconsin came into Montana to hunt buffalo and remained there. Members of their tribe were allotted lands in Wisconsin, but, as they had expatriated themselves and refused to return to their home reservation, the buffalo hunters were not allotted and became nonreservation, landless Indians. Indians of other tribes attached themselves to this group, and some Cree and Assiniboine Indians from Canada, who got into trouble with the Dominion authorities on several occasions, were driven across the border and attached themselves to the band. One time the soldiers from Fort Assiniboine rounded them all up and took them to the Canadian border, but when the soldiers returned to their post they found the Indians ahead of them.

For many years these Indians were tramps, vagrants, objects of charity, panhandlers, and casual laborers around Great Falls, Havre, Big Sandy, Box Elder, and other Montana towns. Some of them settled on the Blackfeet Reservation and, to all intents and purposes, became members of that tribe. The white people of Montana looked upon Rocky Boy's people with contempt and called them scavengers and alley cats, because many of them gleaned their food from garbage cans.

Commissioner Sells secured an act from Congress setting aside about three townships in the southern part of the old military reservation, and, rounding up about 450 of the band, induced them to settle on the new reservation. A number of log huts were built, farming implements, horses, wagons, and seed were distributed, a farmer was placed in charge under the superintendent of Fort Belknap, and the Rocky Boy Band began living as reservation Indians.

An accurate census could not be made, but a tentative roll contains about 450 names. Rocky Boy died soon after his people moved on to the reservation and shortly before his death he wrote me a letter begging me to visit his people. I replied I would do so at the first opportunity.

## ROCKY BOY'S COUNTRY.

Arriving at Box Elder, on the Havre-Butte branch of the Great Northern Railroad, on the morning of September 21 last, I took an

automobile for the 14-mile ride to the main camp of the Rocky Boy Band. The land selected for these Indians is hilly, with many valleys and coulees, some of them quite deep. It is watered by a number of streams and the soil is "spotted"—that is, there are occasional areas of good soil, which can be cultivated as dry farms. But the whole country is well covered with buffalo grass which, it seemed to me, was much better than that on the Blackfeet Reservation.

I reached the main camp about 9 o'clock and found but few men at home. Mr. G. E. Parker, the newly appointed superintendent, had left the previous day for Fort Belknap on business connected with the Indians, but Roger St. Pierre, a full-blood Chippewa, who until Mr. Parker was made superintendent was the farmer in charge, an exceedingly intelligent man, took me in hand. Peter Kenawais, a full-blood Chippewa, was the principal Indian in camp at the time. Rocky Boy, Little Bear, and he formed the administrative and executive council of the tribe, and since Rocky Boy's death he has shared that responsibility with Little Bear, who happened to be at Great Falls the day I was there.

A pleasant surprise met me for, instead of a lot of ragamuffins living in dirty huts and bearing all the marks of tramps and hobos, I found a number of bright, animated, clean Indians. Many of them wore the brilliant sashes of the Canadian Indians; in fact, there seemed to be a strain of French-Indian blood in these people. The men were better clothed than most of the full-blood Blackfeet and many of them were fine looking and of very good physique. The women were not badly dressed and many of the younger women were quite prepossessing in their appearance. The children were not bashful but were playful and seemed to be cheerful. All of the log houses had windows and were cleaner than most Indian houses. Of course, they were less than two years old, but I have seen many Indian homes, newly built, which were so dirty that it required some will power for me to enter them.

Much, if not most, of the clothes worn by these Indians came from the charitably disposed people of Great Falls, Havre, Big Sandy, and other towns in western and central Montana. The good people of Great Falls not only provided clothing but also food and medical attention. This activity will cease now that these Indians have been taken over by the Government.

#### WANTED A SCHOOL-TEACHER.

Asking Peter Kenawais where the men were, he told me they were all out working. He pointed out to me a thrashing outfit about a mile away where a number of Indians were thrashing oats. Much as I disliked calling men in from work, it had to be done, for my time was limited. So runners were sent to the fields and neighboring camps and within a couple of hours about 50 men had gathered in the schoolhouse. They seem to be much pleased that a man from Washington had come to see them. Although most of them could talk and understand English, I was forced to use the office of the interpreter, for they insisted upon holding the meeting as a general

council, and this, of course, required they should deliver their speeches in the Chippewa tongue.

When I asked them what they wanted more than anything else, they said they wanted a teacher for their children. The council was held in the schoolhouse built by them without any expense to the Government for labor. The logs were cut down on the mountains and hauled to the camp and all the men of the tribe had something to do with building the structure. It was quite a large house with a shingle roof and attractive lines, well built, with plenty of windows and a level floor. They told me there were some 40 or 50 children in camp and said they wanted them to go to school, but had no teacher.

(NOTE.—In connection with this I called on Mr. Meritt, Assistant Commissioner of Indian Affairs, immediately on my return to Washington some two weeks later and told him of the request of the Rocky Boy Band for a school-teacher. He at once directed that a day-school teacher be sent there.)

After the council meeting they took me around the camp and brought out their Indian ponies, which they said were altogether too light for farm purposes. The soil in that locality is heavy and they want larger animals, particularly for breaking the sod and plowing. The Indian Office has two Percheron stallions on the reservation to breed to Indian ponies, but it will be several years before the colts sired by these stallions are old enough to work. They also urged me to have a portable sawmill sent there, because lumber is expensive and, as there is plenty of pine on the hills, the portable sawmill would be a good investment.

#### NO RAIN MADE CROPS FAILURE.

These Indians have cultivated over a hundred acres of land, and although last summer was exceptionally dry, so dry in fact that a number of white homesteaders told me they were going to leave the country, the Rocky Boy Indians intend to break more sod next year. Considering the fact that the wheat crop of 1917 in that locality averaged less than 3 bushels an acre on land which the year before yielded as high as 50 bushels per acre, this determination of the Indians to increase their wheat acreage is a good sign and they should be encouraged. Some of the new farmers did not get a bushel of grain from their seeded fields.

In addition to the 70 acres of wheat, which yielded 358½ bushels (a higher average yield per acre than in the neighboring white farms), and 35 acres of oats, which yielded 135½ bushels, a considerable quantity of potatoes, onions, and cabbage was raised. The oats and wheat were raised on dry farms, and, as a matter of record, I am inserting here the names of the Indian farmers who had thrashed their oats and wheat when I was there, together with the acreage and yield.

*First crop report of Rocky Boy's Band, showing acreage and yield, 1917.*

Farmers.	Oats.		Wheat.	
	Acres.	Bushels.	Acres.	Bushels.
Ho-hoo.....	6	8	6½	38½
Leon Gardipier.....	3	14	10½	4
Chief Stick.....	2	6	4	13
Young Boy Shorty.....	4	10	5	20
James Courchane.....	8½	0	9½	20
Dan Belcourt.....			9	4
Charlie Turner.....	3½	32	7½	0
John Courchane.....	3	0		
Jose Little Dog.....	3	0	4½	26½
Mrs. Rocky Boy.....	3	0	8	8½
Will Young Man.....	2	0	10	11
Bow.....	2	0	7	12½
John Oats.....	1½	0	1½	4
Andrew Alex.....	1½	0	10	0
Dan Sutherland.....	2	15	8½	21½
John Gapler.....	3	0	2½	8
Thomas Dunn.....			3	0
David Swaine.....			8½	5½
John Parker.....	2	0	3	8
John Bucket.....	1½	0		
Arthur Rock.....	2½	0		
Albert Larence.....	4	12		
Baptist Smatt Billy.....	1	0	9	16
France Monroe.....	2	0	4	0
Joe Big Sky.....	4½	0	12½	28
Ed. Medicine.....	2	32	3	10
Esare Lafambols.....	3½	0	4½	0
Frank Billy.....	2½	0	3½	0
High Hill.....	5	0		
John White.....	3	0	12	53½
Joe Small.....	3	0	5	4½
Spear.....	4½	0		
Peter Kanawals.....	6	0		
Frank Sangory.....	6	0	8½	11
Eagle Man.....	3½	0		
James Smith.....			9½	7
Left Hand Boy.....		6½		23½

## CATTLE AND HAY COUNTRY.

Roger St. Pierre told me that a number of thrashing and haying crews could be developed among the Indians and that the white farmers in that community could use all the Indians for harvesting.

But, like the Blackfeet and Crow Reservations, this is a grazing country and the Indians should be encouraged to raise wild hay. This will call for an issue of mowing machines and hayrakes and I would suggest that the proper authorities give this matter prompt attention so that the hay-making implements may be provided for next year. At some future time the Rocky Boy Indians may develop into cattle raisers, but that time is remote; it might, however, be well to start them with a small herd. The Commissioner of Indian Affairs approved a lease with a white stockman for 1,600 cattle for \$5.25 a head per year, which is said to be the highest price ever paid for grazing land in that country. This gives an annual revenue of over \$8,000 to the Indians, which is being used for their benefit.

A matter which should receive attention concerns the health of these Indians. Dr. J. B. Mackenzie, of Box Elder, had an informal arrangement, made through the Fort Belknap Agency, to attend the Rocky Boy Indians. He has no authority to treat emergency cases, but only such as come to him with orders signed by Supt. Parker. As a matter of fact he has responded to a number of emergency cases from the reservation, always at his own expense.

He says the Rocky Boy Indians are badly infected with tuberculosis and venereal diseases; that they have a predisposition toward scrofula and are undernourished; they have no stamina; are anemic and easily contract bronchial and pulmonary complaints; they have no idea of ventilation or hygiene and are hard to deal with. He added there is not much trachoma among them. I inquired about Dr. Mackenzie and find he is a leading physician in that country and has a reputation of being a skillful surgeon. I should think that a definite contract could be made with him by the Indian Office which will give him authority to move, at Government expense, emergency cases to the hospital at Great Falls or Havre.

For a year or so more I think it will be necessary to issue rations to these Indians during the winter. Heretofore they have been a liability on the community, but now there is every prospect that they can be made a valuable asset. The life they have been living has sharpened their wits and curious as it may seem, has given them a self-reliance which is entirely absent in so many of our Indians. If they are encouraged now and helped a little bit, the assistance not to go to the extent of pauperizing them, I believe the Rocky Boy Band will develop into a useful group of Indian farmers and stock raisers.

It was interesting to note, however, that they are already acquiring some of the habits of reservation Indians. They are rapidly learning how to protest and demand and, I suppose, before many years they will be sending committees to Washington, but I desire to point to one significant fact: They said they wanted a school-teacher so their children might be taught in the schoolhouse which had been built for them by their fathers and brothers, and that was the first thing they told me they wanted.

The Commissioner of Indian Affairs has made his plans for the advancement of the Rocky Boy Indians in considerable detail, and the dominant feature of them lies in the purpose to teach the Indians agriculture and stock raising and encourage them to use the land. For that reason I have no recommendations to make other than to suggest that it would be well to make definite arrangements for adequate medical and surgical attention.

Respectfully submitted.

MALCOLM McDOWELL.

HON. GEORGE VAUX, Jr., *Chairman.*

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## APPENDIX H.

### REPORT ON THE SEMINOLE INDIANS, OKLAHOMA, BY WILLIAM H. KETCHAM.

WASHINGTON, D. C., *January 28, 1918.*

SIR: Sometime in October or September last there was held a mass meeting of Seminole Indians in Seminole County, Okla. As a result of this mass meeting, a letter was addressed, October 4, 1917, to Commissioner Moorehead, calling attention to serious conditions prevailing among the Seminole people and asking information on certain points. The letter, signed by John H. Wise,



chairman, and James H. Johnson, clerk, was sent from Lima, Okla. Commissioner Moorehead forwarded it to Hon. Malcolm McDowell, secretary of the board, who, on December 21, transmitted it to me at Oklahoma City, with the request that I should make an investigation of conditions in Seminole County. I at once wrote to Mr. Johnson that I would come to Wewoka on the 20th of January and requested him to meet me there with such members of the Seminole Tribe as he might be able to get together, so that I might have a conference with them on the following day. My purpose was to spend several days among the Seminoles and to make an extended inquiry into their home surroundings and health conditions.

About the 20th of January the weather became extremely cold and train service was badly disarranged. As, under these circumstances, it was impossible for any considerable number of representative Seminoles to meet me at Wewoka, Mr. Johnson wired that he and certain others would call on me in Oklahoma City. Accordingly, on January 19, four Seminole Indians—John H. Wise, James H. Johnson, Isaac Jones, and Kaney—called on me. Mr. Johnson acted as interpreter. The delegation was made up of intelligent, fine-looking Seminole Indians who made a very good impression upon me. Their main object seemed to be to obtain reliable information concerning certain matters about which they were in doubt. The following are some of the questions they propounded:

1. Has the field clerk the right to withhold payments of personal funds?

2. Is the land of a restricted Indian taxable?

3. Are inherited lands taxable?

4. Is an inherited homestead taxable?

5. Can children of full Indian blood but whose parents are of different tribes be classed as mixed bloods so far as the question of restrictions on land are concerned?

For example: Can a child of pure Indian blood whose father is a Seminole and whose mother is a Creek be held unrestricted as regards his surplus land in the same manner as would be the case of a child half white and half Indian?

6. What has become of the efforts inaugurated by Mr. Gresham for the recovery of lands out of which Indians of the Seminole Tribe have been swindled?

7. Can the natural guardian of a child be appointed legal guardian?

The following complaints were made:

1. In paying the Seminoles by checks, sent through the mails, the checks sometimes are sent to the wrong parties, in cases, for example, of close similarity of names, and in some instances are never received by the parties for whom they are intended. The Indians said that if the roll number were attached to the check mistakes like this might be avoided. I asked for a specific case and the name of a woman was given who had failed to receive three checks. Moreover, the name of the woman was given who had received the checks and kept them. My informant stated that the matter had been taken up with the field clerk but had never been adjusted. I called this case to the at-

tention of Supt. Parker, who assured me that he would make an investigation at once. Investigation has proved this complaint to be well founded. The mistake has already been corrected. The woman who failed to receive her payments was Misselda, wife of Johny H. Wise. The party who actually received the checks was a certain woman by the name of Mesali.

2. The Seminoles are told there are no school funds for the education of their children and that the property of the children is being sold so that the property of the children is being sold so that their education may be provided for.

On consulting with Supt. Parker, I find that he has no knowledge of any such procedure, neither does he know of any justification for it.

3. Some lawyers contend that when a Seminole dies his homestead becomes taxable and the restrictions are automatically removed.

4. One of the Indians present (Mr. Kaney) stated that one day a letter, said to be from the Secretary of the Interior, was left at his house which, he was told, removed his restrictions; that sometime after a man came to him with an interpreter and bargained with him for leasing a portion of his land. He signed what he supposed to be a lease but which he afterwards found out was a deed. The Indian wanted to know if there is any way by which this land can be recovered. He said that he had made some effort in this direction and that in a short time he would send me all the papers he has in his possession relating to the transaction. Up to the present time these papers have not arrived.

The Indians stated that there is a great deal of tracoma among the Seminoles and they requested that a physician be sent to them to operate upon the eyes of those afflicted with disease.

I requested Mr. Parker to send them such a physician. He explained the difficulty of securing one at this time but said that he would keep the matter in mind and have one sent there as soon as possible.

Not only from the Indians but from others I learned that probate matters in Seminole County are in a deplorable condition, and certain attorneys in Oklahoma City informed me that the graft perpetrated around Wewoka has made that particular section of the country notorious above all the notorious graft centers of the Indian portions of Oklahoma.

Believing that the Seminole situation is so bad that it could scarcely be worse and that immediate and radical measures must be taken at once if anything at all in the way of relief is to be accomplished, I told the Indians that I would ask the honorable Secretary of the Interior to send at his earliest convenience a personal representative to them to make full inquiry into their complaints and the injuries they have sustained.

I suggest that because of the magnitude of the task the Seminole conditions present, the Board of Indian Commissioners request the Secretary of the Interior to take immediate steps for relief. I suggest further that, when an opportunity offers, one or two members of the Board of Indian Commissioners devote some time to inquire into the health conditions of the Seminoles and into their

home surroundings. The board can be of help to the Interior Department in inquiring into conditions and in offering suggestions.

Respectfully submitted.

WILLIAM H. KETCHAM.

HON. GEORGE VAUX, Jr., *Chairman.*

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## APPENDIX I.

### REPORT ON THE KIOWA AGENCY, OKLA., BY WILLIAM H. KETCHAM.

OKLAHOMA CITY, OKLA.,  
*January 21, 1918.*

SIR: I spent January 17 and 18 at Anadarko and Fort Sill, Okla., inquiring into conditions, particularly health conditions, among the tribes of the Kiowa Superintendency. Under this superintendency are the Kiowas, Comanches, Wichitas, Caddos, and more than 200 Apaches. Mr. Jules Schevitz, the secretary of the Oklahoma Association for the Prevention of Tuberculosis, accompanied me.

With Supt. C. V. Stinchecum and Dr. Claude S. Chambers, the Government physician, we visited the schools at Anadarko and Riverside, and I addressed a representative gathering of Indians of several tribes, assembled in the superintendent's office, on the subject of tuberculosis.

Supt. Stinchecum went with us to the school and the sanitarium at Fort Sill.

The management of the three schools visited is worthy of commendation. The Anadarko School impressed us by its cleanliness and the exceptional good health of the pupils; the Riverside School is being brought up to the desired standard by the present superintendent, recently placed in charge; the Fort Sill School appears to be conducted in an efficient manner. I heard the statement made that the Fort Sill School plant is the best of the reservation school plants.

The Fort Sill Sanitarium is decidedly a success and the management very creditable. The Indians have learned to appreciate it and it would not be possible to overestimate its value to them.

Among the tribes of the Kiowa Superintendency there is much trachoma. Dr. Chambers states that he has performed something like 3,200 operations for trachoma and that about 30 per cent of the Indians are afflicted with the disease.

While tuberculosis is not so prevalent among these Indians as among certain other tribes of Oklahoma, it demands serious consideration. The superintendent is of the opinion that it can be completely eradicated if the proper steps are taken at once. He plans to form a tent colony for tubercular patients on the ample grounds of the sanitarium. Already a few tents have been put up. The physician in charge of the sanitarium can very easily supervise the tent colony. It will not be an impossible undertaking to assemble all tubercular sufferers into this colony, but, to accomplish it, there are two requisites—adequate funds and enforced segregation. It is believed that if segregation be enforced in one or two cases there

will be no difficulty in inducing all who have tuberculosis to come into the colony without any form of coercion whatever. Dr. John W. Duke, health commissioner for Oklahoma, has promised to enforce segregation whenever he is requested to do so by the Indian Office. As the local superintendent is in favor of enforced segregation the matter rests entirely with the honorable Commissioner of Indian Affairs.

The tribes of the Kiowa Superintendency have been accustomed to firm discipline and it is thought good policy to begin with them in the enforcing of segregation. If segregation can be carried out successfully here, the way will be paved to carry it out in other portions of Oklahoma which are vitally in need of it.

The Oklahoma Association for the Prevention of Tuberculosis volunteers to aid the Indian Office by conducting an active campaign of education on the subject of tuberculosis for the benefit of the tribes of the Kiowa Superintendency and, in fact, of all the tribes of the State of Oklahoma.

I recommend that the Board of Indian Commissioners urge an ample appropriation or at least an adequate allotment of funds to make the tubercular colony feasible and that it suggest to the honorable Commissioner of Indian Affairs the desirability of sustaining Superintendent Stinchecum in an effort to enforce segregation.

Respectfully submitted.

WILLIAM H. KETCHAM.

Hon. GEORGE VAUX, Jr., *Chairman.*

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## APPENDIX J.

### REPORT ON THE CROW INDIANS, MONTANA, BY MALCOLM McDOWELL.

WASHINGTON, D. C., *December 16, 1917.*

SIR: I made a survey of the conditions of the Crow Reservation, in Montana, September 23 to October 3, 1917, inclusive, and offer the following as my report:

There is no disputing the facts that the Crow Indians have suffered much and, for many years, have been in a bad way; that in some cases they have not been given what they say was a square deal; that there has been much friction between many members of the tribe and several superintendents; that influential groups of white men in Billings, Hardin, Sheridan, and other neighboring cities are coveting their choice grazing and farming lands; that some of the lessees of grazing land used certain Indians to foment strife and breed disorder to force certain other lessees off the reservation; that an important part of the white population of Montana is in favor of homesteading the surplus lands in the reservation so as to increase the white population and quicken the economic development of the State and that they are willing to accomplish their ends without any regard to the wishes to the Crow Indians.

It seemed to me the Crow Indians, as a whole, are not so ambitious, so progressive, as many other tribes. There are a number of bright,

capable, energetic Indians on the reservation, but most of such are mixed breeds. But, taking the tribe as a whole, the impression one gets is that these Indians are ultraconservative and are just beginning to progress toward civilization.

This impression is deepened when one views the thousands of acres of fine, irrigated land which lie idle. The Crows seem to be more content with receiving a small sum an acre out of leasing to white farmers than to work their land and become self-supporting people. Every square foot of grazing land is in use for all the land called grazing (some of it might better be classed agricultural) is under lease or is grazed by the tribal herd. Some of the richest agricultural land in Montana lies between the Big Horn and Little Big Horn Rivers. Thousands of acres are under ditch; there is a growing market for all the hay, alfalfa, grain, and vegetables which the whole irrigated area can produce; there is unlimited water for irrigating purposes; the Indians have been urged for years to farm their irrigated allotments and yet only 287 Indians out of the total population of 1,710, last year farmed 18,775 acres themselves out of 71,640 acres under ditch and 2,015 acres out of 7,304 acres of upland. According to the records in the office of the superintendent there are only 18 Indians engaged in the live-stock industry as a means of support and it is estimated that 200 Indians own some stock and the total number of cattle owned by all Indians is given as 4,227.

#### SOME HOPEFUL SIGNS.

These figures, considering the number of years during which the Indians have had allotments under irrigation, are not very encouraging, and yet there are evidences of progress. For instance, Ella K. Cashen, a half-breed, 40 years of age, got \$3,525 from hay cut on 300 acres last year; James Carpenter, a full blood, 36 years old, from 250 acres of wheat, hay, and oats received \$2,035; James Blane, a full blood, 41 years old, from 105 acres of wheat, hay, and oats, got \$1,583; Frank Shane, a half-breed, 46 years old, got from 135 acres of wheat, hay, and oats, \$1,800; and Crooked Arm, a full blood, 67 years old, got \$1,244 from 94 acres of the same crops.

It is interesting to note that the live stock owned by individual Indians last year included 9 boars, 27 bulls, 2,800 cows and heifers, 114 hogs and pigs, 3,302 horses, 1,781 mares, 2 mules, 62 pony stallions, 23 large stallions, 1,400 steers, and 1,863 chickens, having a total value of \$511,000, and only 27 families owned and used milch cows.

Last year the Indians raised the following crops:

Oats: 26,343 bushels, value \$13,164, on 2,969 acres; average yield, 8.87 bushels per acre, or \$4.43 per acre.

Wheat: 31,152 bushels, value \$43,239, on 4,153 acres; average yield, 7.50 bushels per acre, or \$10.41 per acre.

Hay: 8,210 tons, value \$51,513, on 6,729 acres; average yield, 1.22 tons per acre, or \$7.65 per acre.

Miscellaneous vegetables and fruits: 280 acres, value \$5,653, or \$20.19 an acre.

There was a marked increase in the number of home gardens cultivated by the women and children this year over previous years

and more acres were planted to potatoes than ever before. Much difficulty has been experienced in inducing the Indians to save their seed. A few placed seed in the warehouses, but when they got hard up in winter they took the wheat, corn, and oats out, a sack at a time, and sold it.

The "home canning" displays, made by the Crow women at the Crow Fair, were particularly significant, because most of them were labeled "first attempt." I talked with a number of the exhibitors and found them quite enthusiastic over canning and preserving vegetables and fruits. They told me they would "put up" more sweet corn, tomatoes, pickles, dried squash and pumpkins, and jams and jellies next year.

The number of self-supporting Indians, as given in the superintendent's report, is 400, and 90 more are making efforts to support themselves with varying degrees of success. The total number of allotments, 2,367, aggregate 470,536 acres, of which 92,206 acres are used as home lots, gardens, and cattle-grazing land by the Indians, leaving 378,330 acres unused. From farming and grazing leases the Indians received during the fiscal year ending June 30, 1917, \$244,753.

#### LAND SHOULD BE USED.

It is believed there is oil in some sections of the reservation and the mountains carry coal and other minerals, and there is a possibility that oil may be found in sufficient quantities to give the tribe a revenue. But the present and future industry of the Crow Indians is confined to farming and stock raising and the Crows are not natural farmers. It is questionable if the Crows now living have the capacity to farm even a substantial percentage of their irrigable or dry-farming lands.

This is not altogether a matter of opinion. The history of the tribe and the unwillingness of the Indians to-day even to attempt to cultivate their irrigated lands warrant the statement that if the farming land of the Crow Reservation is to be made useful it will have to be leased to white farmers until such time as the Indians can be educated up to the point where they will become self-supporting farmers. Personally, I do not think it is possible for the Indians of to-day to cultivate a large portion of their land, and I am rather inclined to favor not only a liberal leasing policy but also a rather liberal selling policy touching surplus land.

I believe that legislation and administration can be combined to prevent the farming lands of the Indians from passing into the hands of white men. I believe that a policy could be established which would result in using lessees to bring irrigated allotments to a high state of cultivation, returning them to the allottees when they, the allottees, have arrived at the stage of progress where they will want to go on their irrigated allotments and farm them. The introduction of white owners and white lessees certainly would tend to improve the roads, scatter day schools over the reservation, and improve the industrial condition of the country.

Agricultural experts are of the opinion that tens of thousands of acres of the grazing land is first-class dry-farming land, and there is much sense in the view that such Indian lands should not be per-

mitted to lie idle and unfenced simply to give an Indian 10 to 20 cents an acre, which does not provide enough money to support him but which does give him enough money to breed idleness.

The last census gives 856 males and 854 females in the tribe, grouped in 465 families. Last year there were but 58 births reported on the reservation and 55 deaths. Of the 1,060 Indians examined by the agency physician 135 had tuberculosis and 130 had trachoma. With one exception, all families live in permanent homes, and the one exception is a patent-in-fee Indian, who lives in a tepee the year round. There are 1,246 full bloods and 259 of half or more Indian blood, and only 200 who are less than half Indian blood. It will be seen from the above figures that the Crows are not a prolific race and that the bulk of the tribe is full blood or nearly so. I had little difficulty in making myself understood with most of the Indians to whom I talked, and I find from the figures that 875 of the 1,710 Indians speak English and 700 read and write English. All but about 700 of the Crows wear the white man's clothing, and the physician classed as mentally and physically sound 1,513 members of the tribe.

It is well to keep these statistics in mind when considering the question, which is now up in Congress, of opening the reservation by offering the surplus lands to homesteaders. The Crow Reservation is divided roughly into three parts by the Big Horn River and the Little Big Horn River, both of which come into the reservation from the south and join at the northern boundary. The triangular tract of land between the rivers, which contains about 750,000 acres, is rich farming land. Much of it is under ditch and, with the exception of the north end, is well watered. The range for the tribal herd is in this triangle, and a large part of the area of the southwest corner of the triangle is mountainous and unsurveyed. The country east of the Little Big Horn and west of the Big Horn River and the three tiers of townships in the southern part of the triangle are leased for grazing. With the exception of the north side of the west side and the north end of the tribal herd range the reservation is well watered. In the west is Pryor Creek and its tributaries running through a narrow but fertile valley, and the tributaries of the Big Horn and Little Big Horn and the creeks and streams that flow out of the eastern part of the reservation into the adjoining Tongue River Reservation, together with numerous springs in the mountains and hilly part of the reservation, give the reservation the water which makes for good grazing and irrigation.

#### LAND AND CATTLE.

The Indian allotments are along the rivers and streams. Something over 48,000 acres have been allotted to 2,452 Indians, and there are 1,832,269 acres unallotted, most of which is grazing land. The areas susceptible of irrigation aggregate 153,750 acres, all of which is allotted. The area now under projects amounts to 74,020 acres. The several irrigation systems that are on the reservation have cost over a million and a half dollars to date.

The reservation is divided into five districts for grazing leases. District No. 1 includes two-thirds of the eastern part of the reserva-

tion and contains 402,632 acres; district No. 2 occupies 242,218 acres in the northwestern part of the reservation; district No. 3 takes in 356,262 acres just west of the Big Horn River and is leased for sheep grazing; district No. 4, also used for sheep, lies west of district No. 3 and extends to the west line of the reservation, having 483,928 acres; and district No. 5, which occupies the south end of the big triangular tract between the Big Horn and the Little Big Horn Rivers, contains 480,661 acres. The tribal herd uses the land between the two rivers north of district No. 5. Districts No. 1 and No. 2 are leased in one tract for an annual rental of \$62,700, district No. 3 for \$71,100, district No. 4 for \$79,000, and district No. 5 for \$31,950. This revenue, aggregating \$244,750, goes into the tribal funds and is distributed pro rata, and Indians who have allotments within leased grazing areas are paid from 10 to 20 cents an acre for the use of their lands. The superintendent reported 48,200 cattle and 118,500 sheep as the number on leased unallotted land June 30, 1917.

The tribal herd is valued at \$837,300 and consists of 291 bulls, 10,314 cows and heifers, and 5,782 steers, a total of 16,387 cattle. This herd was in good condition; the animals were fat and to all appearances are well cared for.

So far as the tribal herd is concerned, the Indians seem to have only an impersonal interest in it. I have referred to the fact that a number of individually owned cattle run with the tribal herd, the owners apparently taking small interest in their stock, leaving its care to the employees of the agency. I asked a number of full-blood Indians why they did not raise cattle and almost invariably they said they would when the tribal herd was distributed among the members of the tribe. Some of the mixed breeds have shown considerable enterprise in raising cattle, and the highest price secured for a steer in that part of Montana was for an animal raised by Robert Yellowtail, one of the educated Crows. I am satisfied that the full-blood Crows are not agriculturists and probably never will be. They are at home in the saddle; they are born horsemen, but as long as the cattle range on the reservation is leased to white men the only chance I can see for the Crow Indians to become cattle raisers will come from their working for the white lessees and thus not only learn how to manage a live-stock business but realize its money-making capabilities.

#### WHITES MAY GET LAND.

The general feeling in southern Montana is that in one way or another the great grazing, unallotted lands of the Indians east of the Little Big Horn and west of the Big Horn Rivers ultimately will be owned by white men. Every foot of it is now in use, because it is all leased to cattle and sheep men and is carrying all that the grass will permit. There are hundreds of thousands of acres remote from water, too high for irrigation, and valuable only for grazing. The opinion of men, interested and disinterested, who have knowledge of the soil and climate conditions is that this land will have to be used in large units. I have referred to the opinions of skilled agriculturists that the upland near rivers is good dry-farm land, although it is now classed as "grazing land."



The income from grazing lands does not give the individual Indian sufficient to support him. It would require an enormous amount of money to carry out the proposed plan, which contemplates the discontinuance of leasing to white men and stocking the ranges for Indians, with the idea that they will become cattle raisers on their own lands. I may be wrong, but the only hope I can see for the Crow Indians is to induce or educate them to go upon their irrigated allotments and become farmers, selling the surplus unallotted lands to provide money to properly equip them with homes and implements.

There is a bill pending in Congress which provides that the unallotted children shall be allotted; that all the remaining unallotted lands shall be divided pro rata, and that the Indians, under suitable regulations, shall be permitted to sell their surplus lands, their homesteads and irrigated lands to be held under restrictions.

I found that this measure was approved by the Crow Indians with whom I talked. As it would give the Indians the choice of selling their surplus lands or holding them as they saw fit, this would overcome the objection to a former bill which was designed to open the surplus lands to settlement without giving the Indians any voice in the matter.

#### SCHOOLS ON THE RESERVE.

There seem to be school facilities for all Indian children on the reservation, for there are three boarding schools—two Government and one Catholic—several public day schools which Indian children attend, and there were five day schools, conducted by Baptist and Congregationalist missionaries, but the Congregational school at Crow Agency was closed because of the death of the missionary in charge. The last school census shows 243 boys and 223 girls, a total of 466, on the reservation. Of this number 50, for one reason or another, were ineligible, leaving 416 eligible children of school age.

On almost every reservation I have visited I noticed more or less truancy. As it is well known, Indian parents do not like to discipline their children, and if the child does not want to go to school the parents generally find some means to help him evade his school duties. In this connection I wish to offer this suggestion: If parents of white children are compelled under compulsory school laws to send their children to school a certain number of days a year, why should not the parents of Indian children likewise be compelled to do so. I further suggest that Congress be given an opportunity to pass a compulsory school law, to be effective on Indian reservations.

In studying the records of arrests on the Crow Reservation I was much pleased to note that of the 15 arrests for drunkenness during 1916 and 1917 only 6 could be charged to the Crow Indians, and that of the 59 men arrested charged with misdemeanors only 15 were Crows.

#### HEALTH AND SOCIAL SERVICE.

The health conditions on the reservation were not so bad as had been reported to me, although over 8 per cent of the Indians have tuberculosis and about the same per cent are afflicted with trachoma. The frame hospital at Crow Agency has a normal capacity of 16,

but can be crowded to care for 24 patients. This is under the supervision of Dr. Townsend, the agency physician, who struck me as being a very energetic and capable man, much interested in the Indians and popular with them. The health of the Pryor Creek Crows is under the charge of Dr. H. L. Oberlander, who is subagent and physician. He is one of the most efficient men I have met in the Indian Service, for in addition to his manifold duties as subagent, physician, farmer, and general factotum, he is a power for good along social-service lines. Pryor Creek Indians, almost all of them full bloods, seemed to me to be the most progressive on the reservation, and this is largely due, I am sure, to the indefatigable labors and kindly tact of Dr. Oberlander.

As on all other reservations, the three field matrons are seriously handicapped in their work because they are not properly equipped to do it. The Crows live along the creeks and rivers, many of them remote from the community centers where the field matrons have their headquarters. It is simply a physical impossibility to reach even a small portion of the families without an automobile. Crow women need help from the field matrons, and, what is more to the point, they want and ask for it. Field matrons without adequate facilities in the way of transportation can not carry out social-service activities effectively.

The Crow women are in a receptive mood now, and the time is ripe for field-matron service on that reservation. During the annual Crow Fair at Crow Agency I talked with a number of women, and from what I learned I feel certain that if the field matrons receive official encouragement in a practical form they will accomplish much good with almost immediate results.

Better roads are a prime necessity on the Crow Reservation. This is apparent to anyone who travels through that wide expanse of territory in an automobile or wagon. The abandoned right of way of the Chicago, Burlington & Quincy Railroad, which closely parallels Pryor Creek and goes through Pryor Gap between the Pryor Mountains, offers unique opportunity to secure a good level road with bridges, trestle, and culverts all in from Pryor to the northwestern section of the reservation, where it would join the road from Hardin and Billings.

The county in which the Crow Reservation is located owns a heavy road grader, and there is a large steam tractor on the reservation. With these two machines and some Indian labor a fine road could be made at a comparatively small expense. I was told that the county officials would heartily cooperate with the Indian Service in transforming this abandoned right of way into a first-class road. Not only would such a highway be of almost inestimable value to the Indians but it would serve as a short cut for automobile travel to the Yellowstone Park from points north and east of the reservation.

With Supt. Calvin H. Asbury I went to several parts of the reservation and was much pleased with the way he took hold of matters in his new field of operation and with the tact and good judgment he displayed. He outlined his plans to me, and most of them are in line with recommendations I would make had he not just taken hold of the management of affairs. He is much interested, and has been for many years, in those social-service activities which the board

long has regarded as of prime importance, and the human equation looms large in the Crow problem.

More than all else the full-blood Crow Indians need education and encouragement—the kind of education and encouragement which will arouse ambition, breed initiative, and create the desire to perform gainful work. Even granting that they have little of what might be called the agricultural instinct, I can find no sound reason why they might not be led to farm their agricultural allotments. Once they realize the satisfaction which goes with a steady income from their irrigated lands, which they could use as they desire without governmental supervision, I believe they will advance rapidly on the road to progress.

Respectfully submitted.

MALCOLM McDOWELL.

HON. GEORGE VAUX, Jr., *Chairman.*

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## APPENDIX K.

### REPORT ON THE PAPAGOES, ARIZONA, BY EDWARD E. AYER.

TUCSON, ARIZ., *March 12, 1918.*

SIR: I visited the present headquarters of the Papago Reservation at San Xavier yesterday. I am very glad to see that Commissioner Sells is making arrangements to change the headquarters to Oasis, about 70 miles west of the present location. It is only in this way that best results can be obtained by the splendid arrangement made by the commissioner in having increased the Papago Reservation, and the agent should certainly be as near the center of it as practical.

It was reported to me that wells already located at the two or three points on the reservation have given very fine results in furnishing water for the Indians' stock; consequently the Indians' cattle are even for this tremendously dry time in Arizona in much better condition than cattle owned by the white people; in fact, are in good condition. This result being gained so soon shows that the department is on the right track, and is certainly very gratifying. Having medical attendants at the agency will, of course, be a great help and is certainly as it should be.

I want to especially call attention to the very bad condition of the agent's house at San Xavier. Of course, Agent McCormick and his family will soon be away from there, but some one will have to take his place, and it is ridiculous that intelligent white people should be housed in such a manner as they are at San Xavier. The commissioner thoroughly recognized this condition when he was there and was undoubtedly in favor of making reasonable improvements and repairs that would be satisfactory and that would be proper and which only amounts to a few hundred dollars, say six or eight hundred. The requisition for these improvements was sent in by the agent and turned down. I am almost sure that the commissioner never saw this letter from the agent requesting these improvements and I can not help but urgently suggest that requests for all such

things as this, where the health and reasonable comfort of the agent is at stake, should always be laid on the commissioner's desk before being turned down by anybody. As it exists there to-day, in this hot climate, the agent and his wife and two children occupy one medium large-sized room with no chance for sleeping in the open air, or anything of that sort, and it could all be arranged with a small amount of money.

It seems a cog has slipped somewhere, as the hospital which was ordered at the new headquarters at Oasis has not yet been started. I certainly hope it will be ready by the time the agency is moved. It may be necessary at any moment, and I think without question there should be two or three more wells. These wells should be in the neighborhood of Tapowa and also in the neighborhood of Piscinamo, thereby greatly increasing the water supply for both the cattle and the people on the reservation.

Respectfully submitted.

EDWARD E. AYER.

HON. GEORGE VAUX, JR., *Chairman.*

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## APPENDIX L.

### REPORT ON THE PIMA INDIANS, ARIZONA, BY EDWARD E. AYER.

TUCSON, ARIZ., *March 12, 1918.*

SIR: I went from Phoenix to Sacaton to look matters over among the Pima Indians. The most important thing to do on this reservation, to my mind, is to put in a lower diversion dam just above the reservation to supply water to the ditch already dug on the north side of the river eight years ago, and furnish much water for the entire reservation. There seems to have been two appropriations already made for this dam—one of \$125,000 and one of \$75,000, the money being in the Treasury. The report is that it is held up on account of the upper dam above Florence not being settled upon, or rather the division of the water, and both are being delayed. The upper one has no influence on the lower one at all. All of the water for the lower one is for the Indians. On account of the river channel widening since this project was started, there is a request for \$75,000 more, which is in a bill for this year. It is very unfortunate that this dam has not been put in before, as the Indians will suffer very materially this year for sufficient water and it is questionable whether they will be able to raise products enough to cover their needs.

I would also urge starting the bridge across the Gila River connecting this reservation at the first possible moment. At the least semblance of high water the two parts of the reservation are divided. I think I shall have a close ally on this subject in Commissioner Sells, as he is well acquainted with this river, and on this trip to Sacaton my car stalled near the south side of the river and before we could get it out the water was within 6 inches of the top of the box.

I found the reservation, as far as the agricultural part was concerned, in fine shape. The only change I would make in this part of the reservation would be that I would not allow the Government to put any portion of it in cotton. There are some 24 acres in cotton this year and in my judgment it had better have been wheat.

I found the dormitories of the school about as bad as possible. There is an entire absence of everything outside of the school to entertain the children. The school has no playground that could be called such, no swing or other appliances that are now found in most all well-regulated schools. There are no rest rooms for the girls; the only places they have outside of the sleeping rooms are the grass plots of the school yard. In my judgment, one of two things should be done—either provide new suitable dormitories with up-to-date appliances for recreation for the children outside of school hours, or abandon the school entirely as now constituted and simply have a school there for people immediately around the reservation, and transfer the most advanced scholars to Phoenix.

There is now only one field matron for the 4,500 Pima Indians, who live in an area extending some 40 miles along the Gila River. I understand there are two more matrons to be appointed in the near future, and it is certainly very necessary.

I would also suggest that at this reservation, and at all the others, the employees have small plats of ground allotted to them—about one-quarter or one-half acre, each with free water, etc. All of the people connected with these reservations are usually, or almost always, earnest, self-denying workers on very small salaries, and if each of the families could have a small plat of ground on which to raise vegetables, etc., it would certainly help them out materially.

There is a large absence here of facilities for teaching the elder boys in woodworking, or anything of that sort. Not only this reservation but others should be supplied with such appliances, in my judgment.

I was at this reservation as a soldier in 1862. The Pima Indians were at that time, and always have been, a charming people. Their assistance to our Army in coming in was very great and freely given. Since that time in the numerous wars with the Apaches they have always been the white man's friend; and, in fact, they furnished scouts and soldiers to help their Government. I think they have never been accused of killing a white person during their connection with us.

You can imagine the pleasure it gives me to see the interest that Commissioner Sells has taken in these people and their kindred, the Papagoes, who also have always been friendly, or practically so.

Before the settlement of Salt River these Indians had all the water and were a prosperous people. The wells have been practically developed and the water reserved to them by the action of the Government and the assignment of additional land on the north side of the river, under the administration of Commissioner Sells, has been excellent, and I feel that these splendid people—the Pimas, Maricopas, and Papagoes—are coming to their own.

I am very sorry to report in regard to the number of Pima Indians that are in the Army. There are about 4,500 people in this tribe.

They have been fighting Apaches during recent times, more or less, ever since they were a tribe. In all the Apache wars in the last 50 years, they have been the best soldiers and guides that the United States has had. When this war broke out there was a militia in which several of the Indians were members. I am told that when the companies were taken into the national service about 20 to 25 Indians were sworn in with the others. Of course, they are not citizens, and it seems they can not be drafted, being under tribal relations. I tried to find out how many volunteered, and was told of only one in the whole tribe. It seems to me that there must be some influence at work among these Indians that is preventing their enlistment. I would suggest that the department investigate this matter, and find out if there is any religious influence at work or any other cause.

Respectfully submitted.

EDWARD E. AYER.

HON. GEORGE VAUX, Jr., *Chairman.*

## APPENDIX M.

### REPORT ON THE MESCALERO RESERVATION, N. MEX., BY MALCOLM McDOWELL.

WASHINGTON, D. C., May 1, 1918.

SIR: Pursuant to request and authorization, I made a survey of the conditions of the Apache Indians on the Mescalero Reservation, N. Mex., and submit the following as my report:

I was on the reservation seven days, March 18 to March 24, 1918, inclusive, and made several trips over the jurisdiction, held two meetings with the Indians and inquired closely into their affairs and living conditions. Supt. William A. Light furnished me with every facility at his disposal for securing information and in every way gave me his earnest cooperation. I found he was fully alive to all matters affecting the Indians under his charge and was much impressed by his sympathetic attitude toward the Apaches.

In January, 1914, Commissioner Ketcham visited this reservation and made a report with recommendations, the most important of which have been carried out, particularly those for the purchase of cattle and for a hospital. In this report he placed particular emphasis on the necessity of strenuously opposing the movement then on foot to convert the reservation into a national park. The Senate bill designed to effect the conversion of the reservation into a park never was reported out of the committee and there is an impression that the efforts to "open" the reservation have ceased. But I was informed at El Paso, after my visit to Mescalero, that the business men of that city have simply postponed the matter and that it is their intention to reintroduce the bill and make an earnest attempt to have it passed. I am referring to this situation only because it is a situation which, after the war probably, may become serious and not because of any need of immediate attention or consideration.

There are two groups or bands of Apaches on this reservation—the Mescalero, for whose use the original area was set apart by an

Executive order dated May 29, 1873, and a number of Apaches known as "Geronimo's Band," who were removed from Fort Sill, Okla., in 1913, where they had been held as prisoners of war for many years. The latter are called "Fort Sill" Apaches on the reservation to distinguish them from the Mescaleros.

Soon after arriving at Mescalero I was told by some Indians that a number of the Mescaleros were almost on the verge of starvation. My investigations satisfied me there was some basis for this report, but on calling Supt. Light's attention to it I found he had made preparations to care for all Indians who really needed rations. The Mescaleros in the Elk River Canyon had a crop failure last year caused by excessive drought, while the Fort Sill Apaches in the White Tail Valley had plenty of rain and made good crops. The complaints of poverty and food shortage were confined to the Mescaleros. I found that some of them were without cash and credit. They could not understand why their "grass money," which is the money received from cattle grazing permits, no longer is distributed to them, but instead is used for the tribal herd.

It seems to me there is considerable force in their contention that a part of this grass money should be held to meet condition imposed by crop failures or other causes, the effect of which is to take away from them sorely needed money. Of course, in the long run, they will be the gainers if the tribal herd increases, but if the Indians need cash to buy food for immediate needs and to properly equip them for farming and the money is at hand and can be made available, I am of the opinion that some of the grass money should be distributed among those who actually need it even though some purchases for the tribal herd would have to be postponed.

#### LAND AND WATER CONDITIONS.

The Mescalero Indian Reservation contains 474,240 acres of land in southern New Mexico. Its greatest length, east and west, is 36 miles, and it is 27 miles north and south. The Sierra Blanca, or White Mountains, extend across the northern end and the Sacramento Mountains lie in the south. The agency headquarters at Mescalero are 18 miles northeast of Tularosa, a town on the El Paso & Southwestern Railroad, just 100 miles north of El Paso, Tex. The entire reservation ranges in altitude from 7,000 to 9,000 feet (excluding the mountain peaks). About 350,000 acres are covered with a fine growth of timber, which is valued at \$3,500,000 (one and a half billion feet). Three hundred and ninety thousand acres are grazing lands, about 9,000 acres are good to fair dry-farming land, and 400 acres are under ditch.

What there is of agricultural land (both dry and irrigable) is of good quality, but it lies in small patches. The growing season is short, for the altitude is high; but the Indians raise wheat, oats, beans, and potatoes as the principal crops. Cabbages and other garden truck are grown and some alfalfa. An effort is to be made to grow barley. But the big, the principal, industry on this reservation is stock raising—cattle, sheep, and Angora goats. It is held that the cattle-grazing lands can not be surpassed in New Mexico. There

is lack of water, but wells can reach water at depths of from 250 to 450 feet, and the water from them is good—not alkali. The principal stream is the Rio Tularosa, which flows through the agency grounds down the valley to Tularosa, where, I was told, is an irrigation district divided among 150 users who bought rights for \$1,000 each.

Of the 400 acres of irrigated land on the reservation 300 are in Tularosa Canyon and 100 at Three Rivers. A title to the water of the Rio Tularosa was fixed in 1908 by a decree of the court, which gives the entire flow to the Indians from 8 a. m. Monday to 5 p. m. Saturday of each alternate week during the irrigation season. The week during which the Indians can not use water is given to the irrigation district of the city of Tularosa.

Three Rivers Creek flows across the extreme northeast corner of the reservation, but its value to the Indians for irrigation is practically worthless, for, by an agreement made some years ago with the Indian office, the owners of land adjacent to the reservation where the creek leaves the Indian country have the use of the water the greater portion of the time, and some of the water is used by the El Paso & Southwestern Railroad. The Rio Ruidoso flows east out of the White Mountains in the northwest corner of the reservation, and recently a pipe line was laid from Carrizozo to catch this water for the use of the railroad. Elk Creek is a Sacramento Mountain stream, flowing through Elk Creek Canyon, in the southern part. Here the land lies too high for irrigation. There are numerous springs in the mountains but too remote for cattle use. The solution of the water problem on the cattle range is wells.

#### THE CATTLE INDUSTRY.

The cattle leases were about to expire when I was at Mescalero and new leases were being arranged. The leases have been running from year to year. The permittees say if they are given two or three year leases they can afford to sink wells and will do so. It strikes me this should be done. The tribal herd will not require much more land for three or four years and this can be provided for by not leasing the pasture adjacent to the one used by the herd. At the expiration of a lease all improvements made thereon revert to the reservation. If the leases are made for longer periods and the lessees drive wells, the reservation would get the wells at the termination of the lease. A well costs from \$2,000 to \$3,000. Supt. Light has recommended longer leases.

It is estimated that with enough wells this reservation can graze 20,000 cattle. At present there are about 12,000 cattle belonging to lessees, and as the tribal herd increases the number of lessees' cattle will decrease, for the tribal herd will require the pastures. A charge of \$3 a head for beef animals and 60 cents for sheep and goats is made for permits. This is about at the rate of 10 cents an acre. The tribal herd was started in June, 1914; the original investment was around \$65,000. The total investment to December 31, 1917, amounted to \$85,758.16, of which \$69,838.60 is reimbursable. The Indians paid for the difference, so that the Government's claim against the tribe is not quite \$70,000.



The last inventory of the herd, December 31, 1917, gave a total valuation of tribal herd property of \$143,688, showing profit over total investment of \$57,929.94. The inventory follows:

1,188 cows, 4 years old, at \$60	\$71,280.00
65 bulls, 4 years old, at \$125	8,125.00
30 steers, 2 years old, at \$50	1,500.00
25 heifers, 2 years old, at \$50	1,250.00
885 yearlings, at \$40	35,400.00
1,025 calves, at \$20	20,500.00
40 horses, at \$50	2,000.00
1 horse, at \$100	100.00
2 mules, at \$200	400.00
1 well, all equipped	2,500.00
1 buggy	108.00
1 wagon	25.00
Water, implements, corrals, tools, etc	500.00
Total	143,688.00
Cost	85,758.16
Profit	57,929.84

I found these Indians taking more personal interest in the tribal herd than the Blackfeet and Crows do in theirs. They really seem to understand that the cattle branded with "U. S." and the bow and arrow is their cattle, although there are some confusion in their minds as to their liability to the Government. Supt. Light is enthusiastic over the herd and its possibilities. He has induced some of the Indians to buy cattle to run with the herd (branding them with their individual marks) and is sanguine that he will get more.

There are over 2,500 Indian ponies—scrub stock—running over the ranges. Each pony eats more grass than a full-grown steer. Something will have to be done to stop this waste. For generations the Apache Indians measured their wealth according to the number of ponies they owned. It will be difficult to overcome this tribal tradition, but Mr. Light is trying to persuade the Indians to sell their ponies, even at small prices, and buy cattle.

#### THE SHEEP ASSOCIATION.

A number of years ago an issue of sheep was made to the Mescalero Indians. Most of them soon got rid of their sheep; but some held them, and the little flocks increased. Ten of these flockmasters—one is a woman—organized themselves into the Mescalero Indian Sheep Association. The flocks aggregated 6,000 sheep, and last year the association sold \$17,394.50 worth of lambs and \$11,000 worth of wool, making the year's income over \$28,000. The business of the association is handled through the superintendent's office. In addition three Indians own about 3,000 Angora goats. There are thousands of acres on the sides of the mountains peculiarly adapted to goat raising; they can not be used for sheep or cattle, and an effort should be made to stock such areas with goats.

The Fort Sill Indians (the Apaches, known as Geronimo's Band, who for many years were held at Fort Sill, Okla., as prisoners of war and who were brought to the Mescalero Reservation five years ago) bought last year 700 head of cattle from individual funds. They are under the supervision of the live-stock superintendent and

are doing well. As the tribal herd and the Indian-owned stock increase in number the grazing permits will decrease, and it is estimated, at the present rate of increase, the Indians will have enough stock to graze the entire reservation in eight years. All the grazing land of the reservation is used by Indians or permittees.

With the superintendent I went to the tribal herd pasture in the northeast section of the reservation and found the Hereford cattle in particularly fine condition—fat and sleek. Two deep wells have been driven for them, and there are all the necessary corrals and equipments for a cattle outfit. The individually owned cattle number between 800 and 900, most of which run with the tribal herd.

Some day this reservation may be the center of a large lumbering business. It is estimated there are over a billion and a half feet of merchantable pine and fir on the mountains. I was told that a large amount of timber is matured and should be cut; that much is dying; and that there is a large loss of merchantable timber each year due to maturity and other causes. A value of \$3,500,000 has been placed on the timber, and the Indians are eager for lumber operations to begin. There also is a strong local feeling among the whites in favor of cutting the timber. The Government has a couple of small sawmills on the reservation, but they now are without steam power. A portable engine and boiler should be bought to make one of the mills available for local lumber demands.

#### GERONIMO'S BAND.

The last reservation census showed a population of 627, of which 444 are the Mescalero Apaches and 183 are the Fort Sill immigrants and their children. The Mescaleros did not take kindly to the newcomers, although at the time it was said they welcomed the ex-prisoners of war with open arms. There now is a more neighborly feeling between the two groups. The Fort Sill Apaches are settled in White Tail Canyon (or valley), about 18 miles to the southeast of the agency. Many are good "dry" farmers, for their land is not irrigated.

The Government built small three-room houses for them. The houses were built out of green lumber, cut and dressed in the little mill installed in the timber near the home sites. Naturally, the lumber being green, warped badly, so that all the houses have large cracks which let in the wind, and the roofs leak. The Government was to provide enough wells to conveniently furnish domestic water. Some wells were driven, but three of them proved to be dry. Consequently, some of the Indians are compelled to carry water for a distance of 3 miles—six miles a round trip.

Supt. Light learned there was an available balance in the Treasury to the credit of the Fort Sill Indians and he proposes to lay pipe from the sawmill well so that every house will have a tap. The Indians are convinced that this balance of \$15,000 is what they call their "fund money," the proceeds of the sale of live stock, farm implements, etc., when they moved from Fort Sill. They object to using this money for a water system, claiming the Government, having assumed the responsibility of moving them from their Fort Sill homes, should provide water for their new homes. They

say they want their "fund money" to meet pressing needs in the way of food, wagons, implements, etc. I met a large number of them at the home of Mr. Frank H. Wilson, the subagent at White Tail, and held council with them. The Rev. Richmond H. Harper, a missionary of the Dutch Reformed Church, of Fort Sill, who was their pastor before they moved from Fort Sill, was present.

Some interested person from the outside has put into their heads the suggestion that the Apaches who come from San Carlos, Ariz., still retain valuable tribal rights there. I told them they were foolish to think of such a thing; that if they had rights at San Carlos they would have to move there and become enrolled and that they then would have to give up all their rights in the Mescalero Reservation. I was at San Carlos last year and the present and future of the Geronimo Apaches on the Mescalero Reservation are unquestionably better in every way than anything they might get at San Carlos.

#### INDIANS WANT A DAY SCHOOL.

The Fort Sills told me they wanted a day school at White Tail for the small children, some of whom now are in the agency boarding school. I brought this request to the attention of Supt. Light and he thought a day school might be placed there. Mrs. Wilson, wife of subagent Wilson, is the field matron at White Tail, and the Indians could not have a better one. A community center is needed at White Tail; an inexpensive house where the women could come to meet the field matron, where instruction could be given; where social meetings could be held. There is a blacksmith's equipment at White Tail and one of the Indians should be detailed as the village blacksmith. As it now is every plowshare, every repair on a wagon or implement, must be taken to the agency blacksmith at Mescalero, 18 miles distant. The Fort Sill Indians also want a jack and a stallion to upbreed their mules and horses.

I asked Mr. Harper if he saw any difference between the Apaches who remained at Fort Sill and those who came to Mescalero. He said he noted a distinct falling down in the matter of discipline and habits of industry on the part of the Mescalero Indians as compared to those who stayed in Oklahoma. He pointed out that when they were prisoners of war they were kept under military discipline; they did what they were told to do; they kept their children at school, etc. He said the Oklahoma Apaches, who are living on their farms, are citizens of the United States; are at work, and are further advanced than are the Mescaleros. But, he added, the prospects at Mescalero are better and he felt rather optimistic.

It was interesting to find that Naiche, who, it is claimed was the real war chief of Geronimo's raiders, is active in church work at White Tail; that old Chief Victoria's son is a policeman at the subagency; that Geronimo's son is disciplinarian at the agency boarding school; and that Geronimo's widow bought \$500 worth of Liberty bonds and wears the Red Cross button. There are only a few of the original Geronimo Band living.

The children of Geronimo's raiders and their children, most of whom were born prisoners of war, live in houses and cultivate

patches of land in the White Tail Valley. All of the houses are in fenced inclosures, have cistern tanks for water, and most of them have root cellars. Few have homes or even shelters for their work animals. They claim the Government promised to build barns. Almost all the individual money brought from Fort Sill has been expended, much of it going into stock, horses, wagons, implements, etc.

#### THE MESCALERO APACHES.

The Mescalero Apaches (as distinguished from the Fort Sills) do not live in houses. With a few exceptions they live in canvas and muslin tents and tepees, for they move with the seasons. In winter they camp on the lower levels and in summer they go to the highlands. Most of them do their farming in Elk Canyon; last year their crops were failures, while the Fort Sills, at White Tail, had good crops. The Mescaleros are more primitive in some ways than the Fort Sills; they still burn down the tepees in which a death occurs and mothers-in-law are not allowed to speak to their sons-in-law. But they are more moral than most Indians; many of them incline to industrious habits and in many respects they are a superior lot of Indians.

All the Indians on the reservation are well inclined to good order and proper living. There is some gambling; the women, in this respect, are the worst offenders. Supt. Light told me there is but little alcoholic drinking. There are two missions on the reservation—the Dutch Reformed Church and the Catholic Church—and both of them are doing effective work. All the male Indians wear white men's clothing and many of them understand and speak English.

The principal retarding influence to progress is the women. They are more inclined to be conservative and keep to the old ways than the men. A good field matron, properly equipped and housed and provided with an automobile, is needed for the Mescalero Apaches. The right kind of a woman could do much to hasten the progress of these Indians.

The reservation boarding school, located at Mescalero, has a capacity of only 100 and is overcrowded. The Indians seem to want their children to go to school. There are about 175 children eligible for school and about 35 can not attend for want of accommodations. If a day school were placed at White Tail all the children of school age could be taken care of. So far as I could see, the boarding school is in good shape. Facilities for giving industrial training are limited and ought to be increased. More dormitory and school capacity should be provided. A number of children are in non-reservation schools. The "returned students" on this reservation show up pretty well; some are "no account," but most of them give proof that their schooling has been of much benefit.

The employees, agency and school, seemed to me to be above the average, and I noted no indications of discord or factionalism. But the low salaries paid employees of the Indian Service is a disquieting influence here as it is in every reservation I have visited, and unless salaries are raised the service will lose all its efficient people. The paltry 10 per cent increase is not and will not be enough to hold men

and women in the service. This is an isolated reservation. There is little here but scenery to attract. If the Government is going to continue its guardianship of Indians it must hire agents, and when it sends its agents to small isolated places like Mescalero it should pay them well for the sacrifices they must make.

The agency physician told me the general health conditions are fair; there is some tuberculosis and trachoma. Last February a new hospital of the standard kind was opened for the treatment of tuberculosis. For a time the Indians would have nothing to do with it, but now they patronize it to its full capacity of 20 beds. Only incipient cases are admitted, and so good have been the results that the Indians have entirely lost their former prejudice against it.

While the general plan of the hospital is good, it is not provided with an operating room or surgical-dressing case; it has no dispensary connected with it, no room that can be used as a maternity ward, and no separate dining room for the doctor, nurses, and employees. All are needed. The strong superstition of the Mescaleros, which causes them to burn the tepee or desert the house in which a death occurs, is a cause of considerable worry to the hospital staff. They fear that the Indians will keep away from the hospital if one should die in it. It was for that reason a man just about to die from pneumonia was carried to a tent outside and died there. The tent had been well prepared, in case he did not die at once, so that he could be kept there.

The Indians have not been allotted on this reservation. As I have shown, there are less than 10,000 acres classed as agricultural land, of which only 400 are irrigable; the balance is "dry-farming" land, and all of it lies in canyons and valleys in small areas. In addition to the recognized agricultural land there are several large areas that might produce an occasional crop that would be called by the white people of New Mexico "agricultural land." Its high altitude and remoteness from water would make cultivation of this land hazardous even if it were used by expert white dry farmers. As it can be relied on to produce a good crop of grass each year, it should be held as pasture land.

The Indians have selected farming lands and have all the rights to such lands which they would have by allotment except title. If the land now classed as agricultural were allotted each Indian would get less than 15 acres; there would be less than an acre apiece of irrigable land. Fifteen acres of high altitude dry-farming land would not support its owner.

I am convinced that the grazing and timber areas should be held as tribal lands for a number of years. It certainly would be poor business to split the timberlands into allotments when, eventually, this land must be handled in large units for cutting and manufacturing the timber. The grazing lands also should be held as tribal property, at least until the Indians have become successful cattle raisers. It might be well, in a few years, to set aside home sites and allot them, but not until the Mescaleros have developed out of what might be called their "seasonal nomadic" habits. The Fort Sill Indians could be allotted home sites now, but were that done it might tend to breed discord between them and the Mescaleros.

## RECOMMENDATIONS.

In conclusion I beg to suggest the following recommendations:

First. That a certain portion of their grass money be set aside each year to meet the emergency needs of the Indians for food, clothing, and agricultural purposes.

Second. That a portable engine and boiler of sufficient capacity be bought to make one of the sawmills available for local lumber needs.

Third. That a day school for small children and a community center for the women be provided for the Fort Sill Indians at White Tail.

Fourth. That a field matron, fully equipped and provided with a house and automobile, be detailed for the Mescalero Apaches.

Fifth. That the hospital be provided with an operating room, dispensary, maternity ward, and a separate dining room for the doctor and nurses and employees.

Sixth. That an additional thrashing outfit for the Carrizo and Tularosa districts be purchased and an additional farmer be authorized for the Carrizo district.

Respectfully submitted.

MALCOLM McDOWELL.

HON. GEORGE VAUX, Jr., *Chairman.*

## APPENDIX N.

REPORT ON THE GREENVILLE JURISDICTION, CALIFORNIA, BY  
MALCOLM McDOWELL.

WASHINGTON, D. C., May 4, 1918.

SIR: Following is a report of my investigation of affairs in the Greenville, Cal., jurisdiction made pursuant to authorization. I arrived at the Greenville School on the morning of April 16, 1918, and was in that country until April 20.

This jurisdiction includes the Greenville Indian Boarding School and the agency, which has supervision over nearly 9,000 nonreservation Indians in 10 counties of northern California, which, with their areas in square miles, are as follows: Butte, 1,764; Shasta, 4,059; Trinity, 3,276; Yuba, 625; Siskiyou, 6,078; Sierra, 910; Plumas, 2,361; Tehama, 3,200; Lassen, 4,750; Del Norte, 1,546; total area of the Greenville jurisdiction, 28,569 square miles.

The original Greenville Agency took in only Sierra, Yuba, Plumas, and Butte Counties, but a few months ago the Roseburg (Oreg.) Agency, which had charge of the nonreservation Indians in Oregon and northern California, was discontinued and the California Indians turned over to Greenville. There is some confusion as to the exact territory given to Greenville, and it is probable there will be some readjustment of jurisdiction between Reno Agency and Greenville. But the changes, if made, will not materially affect the conclusion I formed after completing my survey, that neither Supt. Edgar K. Miller nor any other equally enthusiastic and hard-working

man possibly can properly handle both the school and agency work unless additional clerical help and sufficient money for agency expenses are provided.

This urgent need is so obvious to any interested man who goes into that jurisdiction that I can account for the lack of administrative facilities only on the ground that the Indian Office did not fully appreciate the situation, and this seemed to be the case, for, when I presented the matter on my return to Washington, action to meet the emergency in part was taken immediately by the Indian Office.

But if the nonreservation Indians in the 28,569 square miles of mountainous country of northern California are to be looked after as they should be, there will have to be a rearrangement of organization in the Greenville district which will make the agency activities the important feature in the jurisdiction. The outcome of a rearrangement made with the purpose of solving the problems presented by the nonreservation Indians may be the abandonment of the Greenville or the Fort Bidwell Boarding School, but the condition of affairs can be improved immediately if the Greenville School is placed in charge of a competent principal, under the supervision of the superintendent, so that the latter may devote the major part of his time to the agency work, with the assistance of subagents at Susanville and Redding.

This is an administrative matter and entirely in the hands of the Indian Office, but I feel confident that had Commissioner Sells been able to visit Greenville when he wanted he would have grasped the situation and ordered the necessary changes, for he would have found a body of Indians ripe for citizenship and, for that very reason, in need now of intelligent and sympathetic supervision and assistance.

#### INDIANS ARE COMPETENT.

Most of the allotted Indians were allotted under the Dawes Act of February 8, 1887, but their trust patents bear a date after the Burke Act of May 8, 1906, which puts them in the class of restricted Indians although they also are nonreservation Indians. There has been no accurate census taken of them, but a conservative estimate, based on various incomplete reports, places the population at about 9,000, divided nearly equally between citizen and noncitizen Indians.

They do not live as tribal Indians, for they have no tribal relations. They are grouped by the white people under the general head of "Diggers." They dress like white people and have many of the habits and customs of the whites. Many of them are successful farmers, and, as a whole, the Indians around Greenville are well regarded by their white neighbors as good reliable workmen. I would have no hesitancy in declaring most of them fully competent to handle their own affairs. They are near to full citizenship; by that I mean they are about ready to be given their patents in fee and be entirely released from all governmental supervision.

But before this highly desirable action can be taken their land affairs must be straightened out and their business with the Government must be settled. For many years the landed interests of these Indians were sadly neglected. The files in the Greenville office disclose the fact that in many instances Indians were robbed of their

lands by individuals and corporations. In many more cases the Indians did not get anywhere near what their land and timber were worth.

The land-getting transactions, which occurred a number of years ago, are beyond recall, but they are not so apt to occur again, for the Indians now know the value of their property, and there recently has been a distinct and almost astounding change in public sentiment toward this people, who but a short time ago were regarded as almost beneath any consideration of the whites. In fact, they were despised and were tolerated only because some of them were good unskilled workmen.

I have it on the word of several public officials in the counties around Greenville that this change in public sentiment was brought about by Supt. Miller. One supervisor went so far as to tell me he felt very sorry because in the beginning of Mr. Miller's crusade in behalf of his charges he had misjudged the superintendent and his motives, and he wanted me to know that he and all the other town and county officials were now in hearty accord with Mr. Miller and were cooperating with him in his efforts to make good citizens out of the Diggers. He added that the Indians not only were ready but were willing to assume the responsibilities of full citizenship.

Besides the Indians who are wards of the Government because they hold patents to allotted lands there are a number who are not wards but who are tied up with the Government because they have inherited lands, trust funds, and individual Indian moneys. Before they can become full—that is, entirely unrestricted—citizens their affairs with the Government must be settled, and they can not be completely released from governmental control until all the land titles are cleared by hearings and they are given patents in fee or the land sold and the money turned over to them. The only agency that can do this work is the Government, and the Government must act through the official in charge of the Greenville Agency. I learned that when inherited allotments are sold the beneficiaries generally bought smaller tracts of land and built permanent houses with the money and thus became taxpaying citizens. This, I may add, is unusual, and is one of the several strong indications that these Indians are competent.

#### WORK OF THE AGENCY.

In addition to all of the work I have just referred to, the Greenville Agency must adjust trespass cases, such as where timber is cut by white men without authority on Indian land, and where railroads, copper mines, and lumber mills injure Indian land. There also is land to be leased, rights of way granted, timber from allotments sold to mills, land titles cleared, double allotments straightened out, public-school contracts made, the whisky traffic suppressed, and in many other ways the rights and privileges of the Indians maintained.

The duties and responsibilities of the Greenville Agency are not confined to a small area easily accessible from headquarters. The district covers over 28,000 square miles of the roughest of mountainous country, with roads which are closed to travel in many parts from early fall to late spring. The development of this country is in its infancy, but railroads now are going into it, mines are being opened



up, lumber mills are being built, farming lands are being drained, and irrigation systems are being started. This development is making "jobs" for the Indians and troubles for the agency, for Indian allotments are scattered all over the several counties and there are constant calls for surveys, leases, readjustments, checking trespassers, etc.

Unless there is a good Government man on the alert all the time the material and moral welfare of the Indians is bound to suffer. History should not be permitted to repeat itself in the case of these Indians; they have been neglected and robbed and mistreated, and the atrocious record of white men's avarice and caprice stands as a scathing indictment against us, the ruling race. It is greatly to the credit of the present administration of Indian affairs that in recent years the Indians have been made more secure in their rights and property. But there still is much room for improvement. There is this to say: The character of the country presents topographical difficulties which seriously embarrass efforts to reach all the Indians. Undoubtedly much of the failure to properly protect the Indians was due to the large areas of mountainous country, inadequate facilities for transportation, and the long winters.

But traveling conditions have improved; the Indians have learned how to reach the agent with their troubles and many of them have learned how to look after their affairs themselves to a larger degree. With an efficient agent at headquarters, free to move around the country and with sufficient clerical help, together with subagencies at Redding and Susanville and some good field matrons, it would not take many years to wind up the affairs of the Greenville Agency, for its charges then would be qualified to become full American citizens. Entirely aside from the moral obligations of the Government to these Indians it would be good business policy to separate the agency from the school in this jurisdiction, give the agent men and money sufficient to carry on the agency work along lines planned to make citizens of all Indians in a few years and entirely release them from governmental guardianship and supervision. I am fully convinced that if this program were carried out the expense of maintaining the Greenville Agency would cease in a few years and most of the Indian children would be attending the public schools, thus reducing the appropriation made by Congress for educating Indian boys and girls.

#### HOME AND MORAL CONDITIONS.

This process of hastening the progress of these Indians would arrive at a successful conclusion much sooner if a campaign for bettering home conditions were started now. The moral and home conditions of the Indians require immediate attention. They should be and can be greatly improved and the way to reach the homes is through the Indian women. This would call for the services of capable field matrons, one each at Greenville, Redding, and Susanville.

I am aware that the carrying out of the program I have suggested would materially increase the present expenses of the Greenville Agency. But it must be borne in mind that the Roseburg Agency, which carried a personnel of a superintendent, salary \$1,600; two

clerks at Roseburg, at \$1,200 and \$1,000 a year; a clerk at Redding, \$1,500; one at Susanville, \$1,000; and a field matron at Susanville, at \$300, has been discontinued, and I doubt if the pay roll of a separate Greenville Agency would be much, if any, larger.

When I was at Greenville the superintendent of the Greenville School, Mr. Miller, was attempting to carry on the agency work alone, with some help from the school clerk. He had no money for agency expenses, no subagents at Redding and Susanville, no agency clerk, or stenographer. Manifestly it was a physical impossibility for him to do much of anything for he had the school to look after. And the boarding school, while it is at present a necessity, is the minor activity at Greenville; the important work is hastening the advancement toward release from governmental control of the non-reservation Indians, and this is agency work.

From what I had been told I had the impression that Greenville was but a little nonreservation school tucked away among the mountains of Plumas County and maintained for the benefit of the children of a lot of poor, homeless, landless "down-and-out" Indians. To my surprise I found myself in one of the most attractive schools I have seen, clean, well kept and giving every evidence of first-class administration, the scholars bright, clean, alert, and polite, and, to all appearances, happy and contented. Most of them belonged to the Digger class (Digger is not the name of a tribe). As I have indicated, I found the Digger Indians superior in many ways to most Indians—and here again I met an agreeable surprise. Nearly a hundred of the young Indians in this section have gone into the Army and Navy. I saw many service flags with stars in the windows of a number of Indian homes, with Red Cross membership flags and Food Administration cards.

#### CHANGE IN PUBLIC OPINION.

I have mentioned the change in public sentiment toward the Indians. Two years ago the county officials refused to aid old and indigent Diggers and ignored appeals to care for those afflicted with tuberculosis. Now the county has assumed the obligation of caring for the old and indigent and recently the counties in the Greenville jurisdiction united to build a hospital for tubercular patients and in it there will be provisions for caring for Indians. The county authorities now bury Indians who die poor, when requested to do so by Supt. Miller. The truant officers cooperate with the superintendent in handling truancy and juvenile court cases and the attendance of Indian children in the public schools has increased 300 per cent in the last two years.

An interesting side light was thrown on this change in public opinion by a ruling made by the local board for Plumas County in the case of an exemption filed in behalf of a noncitizen Indian who had been drafted. (The Indian himself did not want to escape the draft; he now is on the western front, fighting in France.) This was in the nature of a test case, and the local board held "that there are no Indians in Plumas County living in tribal relations, and such Indians who are dependent are the wards of the State and entitled to aid as such, and such Indians are subject to military duty and

should be excused therefrom on such grounds only as would relieve other citizens from military duty and service."

This ruling was based on a decision of the Supreme Court of California in the case of *Ethan Anderson v. Shafter Mathews*, which was handed down March 8, 1917, and which is one of the most, if not the most, important decisions made by that court in respect to the status of the California Indians. Anderson, the plaintiff, was a Lake County Indian who prayed for a writ of mandate against the defendant, Mathews, county clerk of Lake County, who had refused to register the Indian as a voter. The decision fixed the status of the nonreservation or public domain Indians in California as full citizens, entitled to citizen rights and amenable to all State laws, the same as white citizens.

I have cited the ruling of the local board and the decision of the supreme court to emphasize the necessity of immediate action to hasten the progress of the Indians in the Greenville jurisdiction. The dictums of the public officials indicate the favorable attitude of the white people of California toward their Indian neighbors, and this favorable attitude can be energized into an active cooperation which will make it comparatively easy for the superintendent to carry out a program along the lines I have suggested. In other words, the time is ripe for putting into effect in this agency the principles set forth in Commissioner Sells's declaration of policy.

All or part of the Plumas, Shasta, Lassen, Klamath, Siskiyou, Tahoe, and Trinity National Forests are in the Greenville jurisdiction, and many Indians were on lands subsequently taken into these great timber reserves by acts of Congress. It has been ruled that the Indians should vacate the lands they occupied, though some of them have good improvements on them. It is held by some of the officials of the Indian Service that such Indians hold proper equity in their forest lands because they were there before the land was made a forest reserve and held undisputed title to it for many years. This matter should be taken up and settled; the uncertainty of possession and title operates to hinder the advancement of the Indians.

And it is only fair to the Indians that their land status in the national forests be established, and that soon. A number of Indians were in the forests at the time of the act of June 20, 1910, which permits an Indian to take an allotment in a national forest, and they desire to get land under the provisions of that act. They should be aided in this matter.

I have purposely refrained from going into the details of administration, life, and conditions, many of them interesting and important, for it seems to me the big, outstanding fact in the Greenville situation is the necessity for immediate consideration of the problem affecting the near future of the nonreservation Indians. The proper solution of this problem will solve all the minor problems, and they are many.

#### RECOMMENDATIONS.

To that end I beg leave to recommend that the superintendent of the Greenville School be given an adequate school force which will relieve him of the details of school administration and that he be provided with sufficient agency clerks and field matrons, with addi-

tional funds, so that he may devote the major portion of his time to looking after the affairs of the nonreservation citizens and noncitizen Indians under his supervision.

Respectfully submitted.

MALCOLM McDOWELL.

HON. GEORGE VAUX, Jr., *Chairman.*

## APPENDIX O.

### REPORT ON THE ROUND VALLEY SCHOOL AND AGENCY, CAL., BY DANIEL SMILEY.

MOHONK LAKE, N. Y., *May 1, 1918.*

SIR: Accompanied by Secretary McDowell, I made a survey of conditions in the Round Valley jurisdiction in northwestern California and submit the following as my report:

We were in that country from March 29 to April 5, 1918, inclusive, visiting the Round Valley School or Reservation and a number of the rancherias which are under the supervision of Supt. Walter W. McConihe. In the beginning of this report I desire to express our appreciation of the effective assistance we had from Mr. McConihe, who gave us the benefit of his long and varied experience in the Indian Service and who placed himself, his office, and his time entirely at our disposal.

Within this jurisdiction are two distinct activities of the Indian Service—the Round Valley School or Reservation, with its agency 2 miles from Covelo, Mendocino County (Covelo is 16 miles over the mountains east of Dos Rios, a town about 150 miles north of San Francisco, on the Northwestern Pacific Railroad), which also is the agency having supervision over a large number of nonreservation Indians who live in 20 communities or rancherias in Mendocino, Sonoma, and Lake Counties. On the reservation are 641 Indians of the Concow, Pitt River, Nomelackie, Little Lake, Redwood, Ukie, and Wylackie Bands and 1,160 Indians live in the rancherias. The rancherias and their populations are as follows:

Mendocino County: Laytonville, 46; Sherwood, 44; Cuyotte, 26; Pinolville, 115; Guidiville, 35; Yokaiia, 92; Hopland, 101; Manchester, 88.

Lake County: Upper Lake (Robinson's ranch), 82; Hardesty ranch, 85; Lower Lake vicinity, 30; Sulphur Lake vicinity, 17; Coyote Valley and Middletown, 44; Scott Valley and Lakeport, 71; Big Valley, 60; Potter Valley, 50.

Sonoma County: Cashia Tribe (Stewarts Point), 108; Geyerville, 25; North Cache Creek and Long Valley, 24.

The tribes represented among the nonreservation Indians include the Pomos, Concows, Noyos, Sanelis, Ukies, Pitt Rivers, Wylackies, and Nomelackies.

The juxtaposition of two classes of Indians, reservation and non-reservation, in charge of one superintendent, living under like conditions of climate, topography, soil, environment, and livelihood, but differing widely in their relations to the Government, for one set of Indians are wards of the Government though some of them are

voters, and the other set are assisted Indian citizens who are not wards of the Government, gave us an admirable opportunity to make a comparison of the effects of two kinds of supervision, one of which is Federal guardianship of restricted, allotted Indians and the other is limited to governmental aid only.

In dealing with the nonreservation Indians the superintendent has no authority over their persons or property. They come and go as they will; they live on Government-owned land at the pleasure of the Government, which can remove them therefrom at any time, but which has practically guaranteed them home sites so long as they occupy the land for that purpose. In short, the rancheria Indians are the beneficiaries of a practical, sane philanthropy, as I will explain later.

#### THE PROBLEM AT ROUND VALLEY.

The outstanding problem of the Round Valley Reservation Indians is raised by the near expiration, by time limitation, of their 25-year trust period. In 1920 the allotted Indians in Round Valley, unless congressional or departmental action intervenes, will be given patents in fee and any funds which the Government may be holding for them; then they should become unrestricted, patent in fee Indians, full citizens of the State and Nation and removed from Federal guardianship.

The land which will be turned over to them is the agricultural allotments in the valley; there still will remain the lands in the mountain pastures, which were allotted in 1911. The trust period of the upland allotments will not expire until 1936. The problem, then, can be set forth in this question: Shall these Indians be given their patents in fee for the valley lands in 1920 and be restricted in the ownership of their mountain allotments until 1936 or shall they be given unrestricted control of all their land and be turned entirely loose in 1920?

Some of the older Indians do not want their patents in fee, but apparently the majority of the Indians are impatiently awaiting February 12, 1920, when the trust period expires on the valley allotments. Our inquiries developed a wide difference in opinions as to the probability of the Indians selling their lands soon after receiving fee patents. Undoubtedly a large proportion of them will sell and spend the proceeds almost immediately and soon will find themselves without land or money. But most of such will be young men; the older Indians, or most of them, will either hold on to their property and use it or will be slow to sell.

These Indians have been under governmental control for nearly a quarter of a century. They have had schools provided for them; the Government has stood between them and avaricious white men; they have had the advantage of long association with white people; many of them as children lived with white families; all of them speak and many write and read English; they wear white men's clothes; they have learned the use of modern agricultural implements, for they work for white farmers; they live in houses which have wood floors and use cooking stoves, beds, chairs, and other furniture; some have automobiles; of late years no restrictions have been placed on their goings and comings, for they leave the valley

to find work in the hop fields, vineyards, ranches, and at wool shearing; a number of them are first-class farmers; in brief, they are qualified to make their unaided way in the world.

But governmental control and supervision have made them timid in accepting responsibility, reluctant to take the initiative, unwilling to make decisions, and, seemingly, have educated in them the belief that whatever they do or do not do the Government, through the superintendent, is bound to take good care of them. I do not wish to convey the impression that these Round Valley Indians are lazy, unprogressive, or worthless; for, as a matter of fact, they are more inclined toward industry than are most Indians. But they are typical reservation Indians and are so imbued with the idea that the Government took a 25-year contract to take care of them when the 25-year trust period was placed on their lands and money that many of them became indolent and do not work when work is easily obtainable, and most of them are improvident. We learned that their reputation for industry and trustworthiness is none too good among their white neighbors.

#### TRUST PERIOD ABOUT TO EXPIRE.

Notwithstanding their shortcomings we could find no sound reason why they should not be given all their lands, both valley and upland allotments, when the trust period for the valley lands expires in two years and all other property held in trust for them. I, then, would separate them entirely from governmental control and supervision and let them go their ways. If some dispose of their property and become landless and penniless, that is their concern. They had their chance and choice.

I am more and more inclined to the belief that Indians ought to be treated like other people—give them a fair chance and then let them work out their own salvation. In the case of the Round Valley Indians, where there is any reasonable expectation that allottees will use their property as the average white man would use his the property should be released from restrictions and turned over to them. There may be exceptional cases—the very old, the helpless, the mentally incompetent—where it would be best for the Government to retain some measure of supervision; but, as a general proposition, these Indians should be released in every way from governmental control and supervision.

If an Indian is pretty certain to sell his land and waste the proceeds, and there seems to be no reasonable chance to reform him, he should be given his property. Then let him waste it if he will. A paternal Government, except to a limited extent, is un-American. I think, as a Nation, we do not want to hold Indians indefinitely as Federal wards, and it is only a question of time when they should be given complete independence. If a body of Indians are making progress in their ability to control their affairs we should have patience to wait, and, while waiting, help them; but if they are making no progress that we can see, then there is nothing to be gained by waiting and holding their property for them indefinitely.

These thoughts apply with considerable force to the Indians in Round Valley. Here is a typical case of what was contemplated

and what we ought to do. There are some old, helpless, and hopelessly incapable Indians in the valley who should be taken care of—a simple matter of ordinary philanthropy. Supt. McConihe's suggestion that the unused and practically abandoned dormitories and the mess building on the agency grounds be turned into an old people's home in which to care for the old and helpless Indians seems to be practical and might be favorably considered by Commissioner Sells. But I have seen nothing on the Round Valley Reservation which leads me even to suggest that the Government delay turning these Indians entirely loose when the 25-year period expires in 1920.

#### THE RESERVATION AND SCHOOL LANDS.

The Round Valley Reservation contains 43,515 acres, of which 958 acres belong to the school and agency, 479 acres are unallotted (most of it is unfit for any useful purpose), and 42,078 acres are allotted. Of the allotted lands 5,386 acres of fine arable soil lie in Round Valley and 36,692 acres, divided equally between open-country grazing land and timberland covered with pasture grasses, lie in the uplands on the high hills. The allotments of valley land, 10 acres to each allotment, to 622 Indians were approved February 12, 1895. The 614 mountain allotments were approved July 11, 1911.

The Round Valley Reservation Boarding School was abolished a few years ago, and the school plant is idle. Some of the buildings, notably the structure formerly used as a girls' dormitory, and the mess building for employees are in a fair state of preservation, but most of the 22 buildings are scarcely worth the scrapping. The 958 acres, however, belonging to the school and agency farm and pasture are valuable. Twenty-five acres are used for building sites and grounds, 16 acres for corrals, 652 acres for pasture, 160 acres are wooded, and the balance is in cultivation. When the work of giving independence to the Indians is completed the Government should be able to realize a tidy profit on the land, for it is carried on the books at a value of only \$24 an acre, probably the original investment price, whereas farming land in the neighborhood, some of it not nearly so good, is held at prices ranging from \$50 to \$125 an acre. It might be practical to reopen this school as an agricultural school for the Indians now under the supervision of the agency. I offer this as a suggestion. This would not interfere with the idea of using part of the plant and grounds for an old people's home for the care of the aged and helpless Indians.

The records in Supt. McConihe's office show there are 441 children eligible for school in the jurisdiction; that 92 of them are enrolled in nonreservation schools (a majority of them in Sherman Institute), and 173 are attending the agency and public day schools, leaving 189 school children unaccounted for. The Indians told us the white people do not like Indian children to attend public schools with white children. But some children living near Ukiah attend the public schools of that city, and I am of the opinion that in time any racial prejudice which may now exist will be removed, for the State board of education is favorable to the coeducation of white and Indian children in the public schools. If all Indian children could begin their primary grades in the public schools side by side with

white children, there would be little left of the Indian problem in the next generation.

Near the agency headquarters of Round Valley is a public school attended almost entirely by Indian scholars. We attended Easter service in the mission church and heard a number of these children recite and sing and were much impressed by the earnest attention paid to the service by the older Indians. The English language only was used in the service. A few white people were in church, and all the Indian men and women wore modern attire. The only difference in appearance between the Indians and the whites in the congregation was in the color of their skins.

#### THE RANCHERIA INDIANS.

We visited the following rancherias: Pinolville and Yokaia, near Ukiah; Hopland, Robinson's ranch at Upper Lake; and saw several others which we did not inspect for lack of time.

The rancheria Indians once were of the class known as "landless" Indians—the remnants of tribes which, before the white gold hunters came, lived in the valleys of California north of Sacramento. Their pitiable history is of record; they were shamefully treated, driven from their homes, persecuted, murdered, and harassed until each tribe was reduced to only a few hundred individuals. They squatted where they could, on white men's land, until driven off, and led a miserable existence.

After a time the Government came to their aid, bought small tracts of land, assigned a home site to each family and, for the first time in years, these Indians had the assurance of permanent dwelling places from which they could not be driven. Some of the bands managed to buy small ranches for themselves. The Yokaia rancheria, about 6 miles southeast of Ukiah, for instance, is owned by the Indians. It contains 127 acres and the land title runs to a trustee, who was elected by the band for that purpose. There are 82 Indinas, grouped into 18 families, living on this tract.

About 35 years ago the Yokaia's were landless; huddled together, as squatters, on a white man's ranch. Because of ill treatment they decided to buy some land on which they might live. In 1885 they got together \$850 and bought a small ranch—the site of the rancheria—for \$4,500. A portion of the ranch was planted to hops at the time. By a fortunate coincidence the price of hops made a material advance that year and the yield was particularly heavy, so that the proceeds from the hop crop paid the balance due on the land and the Indians found themselves possessed of a fine ranch. At that time there were nearly 200 members of the band. For a time the population decreased, but of late years it has been slowly but continuously increasing.

The land is owned, of course, in common, but the only property used in common is a 40-acre farm on which is raised wheat, oats, and alfalfa. Enough of the product is sold to pay the taxes. The alfalfa is fed to the work animals, the owners paying for the feed, and thus the farm pays its running expenses. The business affairs of this, as well as the other rancherias, are managed by a "captain," selected because of his qualities of leadership, and the captains represent the



superintendent. Outside of advising them in matters affecting their relations to their neighbors and of helping them when they get into trouble, the Government, through the superintendent of Round Valley, has little to do with the Yokaias except to teach the children. Last September a schoolhouse was built and a young woman teacher, who is carried on the agency pay rolls, was installed. Several children from this rancheria are at Sherman Institute.

#### HOP FIELDS AND VINEYARDS.

We found the rancheria practically deserted, for the men and women had gone into the hop fields to begin their season's work, from which they will not return until the late autumn. This was the case in all the communities we visited. An Indian in this valley makes a contract with a white hop grower to care for an agreed acreage from about the last of March to the middle of July for from \$25 to \$30 an acre. This is an advance of from \$7 to \$10 an acre over last year's prices. The hop growers furnish the necessary tools and some of them houses; they also plow and cultivate the ground and provide pasture for the Indians' horses. The Indians feed themselves.

Under the contract they handle the vine until the hops are ready to pick. They have the help of their wives and children and some of them take contracts large enough to warrant them in hiring labor. They told us they "break" about even on their contracts; that is, they make a living for themselves and families during this part of the hop season. They find their profit in hop picking, which begins about the middle of August and continues for three weeks. A good picker can make about \$85.

Grape picking begins three weeks after the close of the hop picking and lasts three or four weeks. This ends the seasonal work, and for the following five months there is little cash work to be done except cutting wood, and there is not enough of that to keep all the Indians busy. Some of them go considerable distances for sheep shearing and haymaking, and a few have continuous work on farms and ranches. In the spring, when the pinch comes, the local merchants sell supplies on credit, and the Indians told us the merchants treat them as they do white customers and are fair in their prices and interest rates. But when the debts are paid in the fall there is little left for the year's work.

#### RANCHERIA INDIANS TRUSTWORTHY.

I have gone into this economic phase of the rancheria Indians' lives somewhat fully to emphasize the fact that they, the nonreservation Indians, having practically but slight connection with the Government, are so trustworthy that white men make contracts with them to do important work. If the Indians should break a contract in the midst of the hop-growing season the white owner would suffer a decided loss. I doubt if a white man would place as much confidence in the average reservation Indian, although there are Round Valley Reservation Indians who undertake hop-field contracts. But I think they are exceptions to the general proposition, which

is that Indians who have lived for years under the paternal care of the Government have had little incentive to develop, through exercise, those qualities of judgment, initiative, responsibility, and independent thinking which are necessary to successfully obtain and perform gainful work. Neither have they been compelled, by stress of hard circumstances, to work for a livelihood. The rancheria Indians had to work to live and this condition has made them superior, in many ways, to the reservation Indians who are their neighbors and, in many cases, their blood relatives.

In this connection I desire to express my approval of the way in which the Government has helped the rancheria Indians without pauperizing or coddling them—they were given an abiding place which, to all practical purposes, is their property; the Federal supervision is chiefly of an advisory character and its value and effectiveness depend upon the kind of a man the superintendent may be. But the contrast between the free citizen rancheria Indians and the restricted, closely supervised Round Valley Reservation Indians is so obvious that it strengthened my belief that the sooner the reservation Indians are set free from Federal control the better it will be for them, even though some of them may become landless and penniless.

The Hopland rancheria, several miles south of Ukiah, containing 625 acres, is occupied by 23 families of Senel Indians, who always have lived in the neighborhood. The land was bought for them in 1907 and was settled three years later. It is divided into 8, 12, and 20 acre tracts (the topography is somewhat rough which accounts for the difference in acreages), each tract being assigned to the head of a family. As the Government holds the title to the land and uses it for the Indians, it is "Indian country," and all laws which protect Indians on reservations are in force on the rancheria. In addition to the rancheria proper the Government owns an adjoining hill tract of 1,200 acres which is used by the Indians as a "hunting ground," though there is no game on it. It might be well to consider the advisability of raising goats on this tract.

The Hopland Indians have the reputation of being among the best of the Indians in that part of California, and the neat appearance of their homes and home lots and the general air of independence and selfpoise of the Hoplanders we met bore out the good opinion of the white people. These Indians, without assistance and with little advice, laid 5,000 feet of water pipe from a spring on the hill to the village, supplying the school and homes with fine running water. It was a good piece of engineering work.

#### ATTITUDE OF COUNTY OFFICIALS.

The Pinolville rancheria, 2 miles from Ukiah, is the site of the Ukiah Day School. The assigned land aggregates 103 acres, but the Indians have bought and hold under a trusteeship 160 acres on which they pay taxes. The Pinolville Indians do not understand why the county officials are unwilling to admit old and indigent Indians to the county poorhouse or farm when the Indians pay taxes and vote and, in other ways, exercise the duties of full citizens. It appears that the county officials regard these Indians as wards

of the Government, notwithstanding a decision of the State supreme court which strongly implied that Federal guardianship does not necessarily bar California Indians from receiving the benefits of public institutions, such as hospitals and poorhouses. Some of the town people in Ukiah told Secretary McDowell that the rancheria Indians were a great deal better than the Mexicans and Chinese in that county and should be admitted to the hospital and poorhouse where the Mexicans and Chinese are taken in without question as to citizenship.

The rancherias in Lake County, which we visited and saw, Robinson's ranch and Cuyotte and those near Lakeport, are of the same character as those in Mendocino County, which I have described. We heard varying reports of the degrees of immorality among the rancheria Indians—some said they were very immoral; others that they were not more so than other Indians. Nevertheless we were satisfied that this matter of laxity of morals among the Indians in that part of the State is a problem to be handled by the white people of that section, for morality can not be legislated into any people; religion and education are the only agencies for righting wrongful living, and the responsibility of the morals of their Indian neighbors should be assumed by the white men and women of California.

It will be noted from this report that the superintendent of the Round Valley School serves in the dual capacity of superintendent of a reservation and agent for scattered bands of nonreservation Indians. His headquarters are 16 miles from a railroad point, which can be reached only over a mountain road almost impassable during the winter. At Round Valley are less than 700 Indians, who in a short time in all probability will be divorced from Government control. They then should be given the same assistance which now is given the nonreservation Indians.

Over 1,100 Indians, requiring the superintendent's advice and assistance, live in places remote from Round Valley. They are absent from their homes several months of the year in the spring, summer, and fall, when they work in the hop fields, vineyards, and orchards. It is practically impossible for the superintendent to visit them during this working season. In winter, when they are at home, when their children are attending school, when they need help, the superintendent is held at Round Valley.

It occurred to us that the agency headquarters should be moved to a more strategic point, such as Ukiah, from which the superintendent can reach more Indians oftener than he can from Round Valley. This is an important matter, and I would suggest that the Commissioner of Indian Affairs give it his best consideration.

#### RECOMMENDATIONS.

In conclusion I beg to recommend that when the 25-year trust period on the valley allotments in the Round Valley Reservation expire that the Secretary of the Interior take such action as will release from all restrictions both the valley and upland allotments, to the end that the Round Valley Indians be set loose entirely from governmental control and supervision of their lands and moneys, but that for some time the Government shall give the new citizens such

aid and encouragement as will help them to become independent land owners.

That the Commissioner of Indian Affairs be requested to inquire into the advisability of changing the agency headquarters from Round Valley to a site on the Northwestern Pacific Railroad.

That the Commissioner of Indian Affairs be requested to consider the suggestion that the old school plant in Round Valley be utilized for a home for the old and indigent, a hospital, and a demonstration farm for the benefit of all the Indians in the Round Valley jurisdiction.

That a competent specialist in eye diseases be detailed to treat the nonreservation Indians for trachoma.

That every effort be made to induce the county officials to admit nonreservation Indians to county institutions, and that earnest efforts be continued to place Indian children in the public schools.

Respectfully submitted.

DANIEL SMILEY.

Hon. GEORGE VAUX, Jr., *Chairman.*

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## APPENDIX P.

### REPORT ON THE CUSHMAN SCHOOL AND AGENCY, WASH., BY GEORGE VAUX, JR.

BRYN MAWR, PA., *June 1, 1918.*

GENTLEMEN: I have the honor to report that in company with Commissioner Ketcham I visited the Cushman School, Tacoma, Wash., and some of the reservations connected with it, our stay lasting from April 12 to April 15, 1918.

The school itself had been closed last summer and was reopened in the autumn under Supt. Ernest H. Hammond, who, of course, had to completely reorganize the entire staff. With the difficulty of procuring help at the time this was a serious handicap and the school has suffered materially because some important positions have not been filled, making it necessary for a single officer or employee to perform the duties usually performed by two or three different persons.

#### THE SCHOOL PLANT.

The school buildings are all modern and in fairly good condition, while the equipment, in some lines, is particularly good, especially the machine shops. Opportunities for agricultural pursuits are quite limited, as there is no ground at all available for such purposes. The Indians who attend this school come largely from the extreme West. In addition, there are a number of Alaskans. It would seem to be worthy of serious consideration on the part of the bureau that if both the Cushman and the Salem Schools are to be continued, mechanical activities, including training, in connection with branches that would be valuable in the fishing industries should be strongly emphasized at Cushman and those pertaining to agriculture should be more freely taught at Chemawa.

This would appear to be in the lines of economy of management and would also be a step toward the ultimate solution of the problem

of the nonreservation schools in the future. If some such plan were to be carried out, it is desirable that a printing office should be equipped at Cushman and also the School of Letters should be made a tenth-grade school. In any event a principal of the schools should be appointed, as there is more work to be done in a school of this size than can be accomplished efficiently without a regularly-appointed principal. The English work in the shops is an important part of the training and a well-qualified principal could correlate this so as to make it a very potent influence in training the Indians in the use of the English language.

In view of the large number of Indians from the coast, including Alaska, the emphasis being placed on gasoline and similar small marine engines is much to be commended, and every encouragement should be given to increasing the training in these branches.

It is a very great mistake to suppose that all Indians can be trained practically solely in agriculture or in branches which are connected therewith, and, further, that pretty much the same line of agricultural pursuits should be adopted without regard to the districts from which the scholars come or the vocations which they must follow after their schooling is completed. This course is not pursued with white children, and there would appear to be no good reason which makes it applicable only to Indians. Supt. Hammond is alive to this and his ideas should be encouraged.

From some things we heard at the time of our visit it would appear as though some more definite steps should be taken by which Indian children coming from Alaska are looked after and protected upon their arrival in Seattle. Doubtless when they are going to one of the schools and information is received in advance of the time of their arrival they are properly met at the boat landing, but if there could be some better plan devised than that now in use by which the arriving steamers always would be met by some one who is interested in the Indians, it would be of great advantage to them. Possibly, through the very admirable Young Women's Christian Association in Seattle some method of regular cooperation could be devised which would meet this situation.

#### THE RESERVATION.

There are several small reservations under the superintendent of the Cushman School. Formerly there was another, the Puyallap, which has now entirely disappeared. We drove through some portions of it now developed into the richest of farms, and had pointed out to us the homes of a number of the Indians. These all seemed to be prosperous and several of them are equal, if not superior, to any homes in the neighborhood. Everywhere there were signs of prosperity, not to say wealth, and the tangible arguments presented were most inspiring and cause feelings of the highest optimism as to what may be accomplished where Indians are thrown on their own resources and, through reasonable competition, have their best powers developed. These men and women were asking no odds of anyone, and their degree of success was such as to be marked in any community.

The St. George's Catholic Mission School, located about a dozen miles from Tacoma, is a boarding school and has a considerable number of small children, both boys and girls. We were much impressed with the cleanliness and orderliness of the whole place, and the degree of interest and devotion manifested by all those who are in charge of the school. Both the dormitories and classrooms were bright and cheerful and satisfactorily furnished.

#### MUCKLESHOOT RESERVATION.

The small Muckleshoot Reservation lies some 30 miles east of Tacoma and there are upon it about 150 Indians. They were allotted in 1903 and, as there was not enough land to go round, only heads of families received 40 acres each. The land in the main is good and some of it is heavily timbered. The Indians are mostly farmers. A number of them are working on their allotments, though there is still an enormous amount of work to be done in clearing before really successful agriculture can be carried on. The expense of clearing land in the Puget Sound country is not appreciated by those of us who have had experience only on the Atlantic seaboard or in the prairie country. To remove stumps alone is a stupendous undertaking and often costs several hundred dollars an acre.

It is not surprising, therefore, that the Indians frequently become discouraged, as they have little or no capital resources and the clearing process is one which takes much time, during which period there can be little or no return. We were in a number of the homes of these Indians and found the people in the main cheerful and living fairly comfortably, though there was a good deal of room for improvement in housekeeping methods. The importance of the work of the field matrons was once more emphasized and the desirability of having it carried further and enlarged, so as to take more of the form which has come to be generally recognized as "community center work," was very evident.

#### NISQUALLY RESERVATION.

The Nisqually Reservation was in a very peculiar situation. It contains slightly under 3,300 acres of land and is immediately adjacent to Camp Lewis. Under recent legislation the county in which this reservation lies was authorized to present to the War Department of the United States for camp purposes sufficient ground to meet the requirements of that department for one of the largest camps in the country. The condemnation proceedings against Indian land were pending at the time of our visit and were reached in court about three days after we left. An appraisement of the land by representatives of the War Department gave its value as \$57,920.90, the appraisement by the county was \$70,762.80, while that of the representatives of the Indian Office was \$93,760.

There is a great difference in the value of different parts of the land, growing out of the fact that some of it is gravelly prairie, affording only grazing facilities which are even then poor, while the bottoms along the river, though requiring clearing, are fertile and agriculturally of a great deal of importance. A compromise figure between those of the Indian Office and those of the

Army, which would be \$75,480, seemed to be a fair price for the ground in view of all the circumstances of the case, and an investigation of the awards made in other cases indicated that this latter figure was more than could be secured as the result of legal controversy. The small number of Indians comprising the band could, without difficulty, be placed in the immediate vicinity on other land which would not come within the limits of the ground required by the War Department. We strongly urged the acceptance of those figures.

We were able to attend what was probably the last service conducted in the little Catholic chapel, and talked to most of the Indians, about 30 in number, who attended there. In addition, we saw some of the very few non-Catholic families in their homes. General conditions seemed to be encouraging. They were living in comfortable houses, fairly well kept, and their attitude toward the United States and the administration of affairs for the Indians was encouraging.

#### RECOMMENDATIONS.

In conclusion I offer the following recommendations and suggestions:

(1) That at Cushman a printing office be provided; the School of Letters made a tenth-grade school and, as soon as is practicable, a well-qualified principal be regularly appointed.

(2) That so long as both the Cushman and Salem Schools are maintained mechanical training, particularly in the line of marine engineering, be emphasized at Cushman and agriculture be featured at Salem.

(3) That definite steps be taken by which Indian children may better be looked after and protected upon their arrival in Seattle.

(4) That at Muckleshoot Reservation the field matron work be enlarged and carried further so as to take more of the form which has come to be generally recognized as "community center work."

Respectfully submitted.

GEORGE VAUX, JR.

The BOARD OF INDIAN COMMISSIONERS.

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#### APPENDIX Q.

##### REPORT ON THE TULALIP AGENCY, WASH., BY GEORGE VAUX, JR.

BRYN MAWR, PA., *June 5, 1918.*

GENTLEMEN: In company with Commissioner Ketcham I visited the Tulalip Agency, Wash., April 16 to 19, 1918, inclusive. Arriving at Everett on the afternoon of the 16th, we were met by Supt. Charles M. Buchanan with the agency launch, and, during the time of our visit, he devoted himself assiduously to us, not only making our stay comfortable, but also having us see as much as possible of the conditions as they existed.

In addition to the boarding school at Tulalip and the reservation, there are several outlying reservations, the only additional one of which we visited being that at Lummi, about a dozen miles north of Bellingham.

## THE TULALIP SCHOOL.

For the Tulalip School and its management we have nothing but praise. Certainly, Dr. Buchanan is entitled to the highest commendation for the indefatigable devotion which he shows to the Indians and their interests. He has brought to his work a trained scientific mind, and the whole school shows the results of the application of intelligence and force. The general conditions at Tulalip have been reported on frequently, so that it is not necessary for us to go into more than one or two matters.

As on other reservations, the question of the disposition of petty offenders, both adult and juvenile, is an important one. There was formerly a guardhouse at Tulalip, but it was torn down some years ago and has not been replaced. As respects boys, a substitute for this has been found in a room in the basement of the boys' dormitory building, but the quarters are not such as are desirable for this purpose, and the moral effect on those who may be incarcerated there is not nearly so great as would be the case were there some adequate provision made. Under the laws of Washington possibly juvenile delinquents could be sent to some State institution, but up to the present time the State authorities have declined to take such offenders, and it is clearly the fact that something should be done for them. We would suggest that some study be given to the whole question of Indian juvenile delinquency, for it is an important one in a very large part and affects nearly all of the reservations in the country. As a result some suitable plans might be devised adequately to meet an absolute need.

## SUPERINTENDENTS AS MAGISTRATES.

Some provision for adult delinquents is also a vital necessity. In some of the reservations it may not be necessary for the superintendent to have such broad powers as those which ought to be exercised by the superintendent at Tulalip. In an isolated locality, however, such as are many of the northwestern reservations, the superintendent should be clothed with ample powers of a committing magistrate, with authority to sentence petty offenders to brief terms of incarceration. Simple jails or guardhouses in which such sentences could be served should be provided also. At the present time in the vicinity of Tulalip the superintendent is openly defied by malefactors who know and boast that he has no place in which he can punish them, and, accordingly, his efforts are without the strong backing of legal authority which they ought to have.

The lumbering operations on the reservation were progressing rapidly and satisfactorily, a small logging road having been run in from a specially constructed wharf at the shore to haul the logs down from the woods. When the timber is cut, however, the further use of the ground is uncertain for the reason that the difficulties and expense of clearing it, in order to fit it for agriculture, are so great. Several hundred dollars an acre are often required, and the Indians usually have neither the initiative nor the capital to enable them to carry on so important an operation. Probably the most effective way is by making leases for a considerable term, conditioned upon the



tenant clearing up the land. The term of such leases should not be less than 8 or 10 years. At the present time the maximum is 5 years, which is hardly enough, though increased from what it was formerly.

We saw and talked to a considerable number of the Tulalip Indians and found them to be contented, loyal, and intelligent. There have been some difficulties among them caused by the "Shaker" cult, which will be referred to later in this report, but most of the Indians to whom we talked were very much opposed to what was being done by those agitators, and it is to be hoped, with the diplomatic advice of the superintendent, difficulties of this sort will be reduced to a minimum at Tulalip.

#### LUMMI RESERVATION.

The Lummi Reservation is situated also on the Sound, possibly 80 miles north of Tulalip. We were driven there in the agency motor by Supt. Buchanan. A considerable number of the Indians had been notified to meet us at the day school. The object of the meeting was to discuss certain petitions which have been forwarded to the Indian Bureau by some agitators among these Indians, and also by some of the white people of Bellingham, a city about a dozen miles off, in which they set forth their desire to have permission granted to the Indians to revive certain of their ancient pagan dances.

A few words of explanation may be desirable in the interest of clarity. For a great many years back practically all of these Indians have been members of the Roman Catholic Church, which has maintained missions among them for upward of 50 years. Within a comparatively few years, however, an extremely emotional phase of alleged religious performance has gotten considerable vogue among them (as it has among the Indians in many parts of the far West), known as the "Shakers." This cult is in nowise connected with and must not be confused with the well-known communities of that name in the East. Gradually in the regions where this line of performance has become popular small chapels or churches have been built, and the Indians have left the Christianizing influence of the missionaries of the various denominations and attend only their own services in these chapels.

We did not attend any of their performances and we can not state at first hand from what we saw ourselves as to exactly what is done, but there seems to be no secret with regard to the fact that an extreme trembling, jerking, or shaking (hence the name) is an important part of their exercises. These motions are often kept up for many hours without intermission, and it can readily be seen what would be the highly excited condition of the participants after such actions had been in progress for 15 or 20 hours. This cult seems to be one that has arisen much in the same way as the peyote "religion" farther east and has no more to recommend it. It is one of the matters which should be handled by the bureau in some way, but, like the peyote habit, what is done should be after careful study as to the best methods to be adopted to get rid of the source of the difficulty, and with discretion, but at the same time with absolute firmness.

## THE SQUEHEALOUS DANCE.

Recently there has grown up also a reversion to some of the old pagan rites of these Indians, including the squehealous dance. It is for the official approval of the latter, as a proper means of diversion of the Indians, that the petitions above referred to are asking. A large part of the several hours conference which we had with the Lummi people was devoted to a description on their part of these dances and an endeavor to defend them from the adverse criticisms which have been made by Supt. Buchanan, the missionaries, and other thoughtful people. It was urged with some degree of adroitness that the dances in themselves are not objectionable, in fact far less so than many of the amusements in which the whites indulge, including dancing parties, moving-picture shows, etc., and while this may be true as respects one phase of the dances, it was brought out absolutely and without any attempt at denial that their performance is a reversion to pagan rites, leading Indians specifically referring to them as a "religion" and as not opposed to other religions, etc.

Further than this they claim that a particular song which they sing in connection with these dances has the power to cure disease, and three concrete instances were cited to us by name. Two of these persons were present and detailed their symptoms (one of them had had an operation for appendicitis) and how regular doctors utterly failed to do anything for them, but that when they indulged in these pagan rites they were speedily entirely cured. In one case the sufferer had been ill for over two years and her husband had spent upward of \$1,400 in medical attendance for her. Almost all of the eighty-odd Indians who took part in the conference fully believed in the view that these performances can cure disease.

After a very careful consideration of the testimony which was deduced, we can not see anything but evil in permitting these dances, and we most strongly urge that no backward step be taken on this connection, but that their prohibition be made even more positive.

## TREATY DAY CELEBRATION.

The Indians tried to excuse their performance upon the ground that the "Treaty Days" celebration, which had been introduced by Dr. Buchanan, was really a reversion to old Indian rites, and the totem poles, which have been carved by one of the school employees and erected on the school grounds at Tulalip, are also a reversion to their original methods of worship. Probably it will be hard for an Indian to distinguish between a scientific effort to preserve ethnological data and an effort to reintroduce paganism. There is, however, an enormous amount of difference. Dr. Buchanan is fully alive to the factors of the situation and is taking the necessary steps to try and prevent complications arising from charges such as these Indians made.

It is true there are but few amusements, especially for the older people in the long winter evenings, but it would seem as though

some other method than that desired by them could readily be adopted. So far as the good people of Bellingham are concerned, some of them with whom we talked expressed extreme surprise at the religious emphasis placed on these proceedings by the Indians, and we very much doubt whether they have gone into the matter in detail and fully understand all that is involved, or they would not be in favor of it to the extent that now appears. It is always difficult to tell just when a selfish desire to exploit things of this sort is really back of such an application.

Another very serious situation exists at Lummi. There are good reasons to believe that considerable number of these Indians are covertly disloyal to the United States and have been victims of pro-German propaganda. We endeavored to bring to bear such influence as we could upon them to point out the impropriety of such conduct on their part and the probability of its getting them into serious difficulty.

Dr. Buchanan is aware of the gravity of this situation and should have every support possible in breaking up a hotbed of sedition. The same persons among the Indians who were active in trying to reintroduce the pagan dances are those who are apparently the leaders in sowing disloyalty. There would appear to be some connection between the two, but just what we were not able to discover.

#### RECOMMENDATIONS.

I beg leave to offer the following recommendations and suggestions:

(1) That the Board of Indian Commissioners make a study of the whole question of Indian delinquency, juvenile and adult, for the purpose of laying before the Secretary of the Interior suitable plans devised to meet what is becoming a serious situation.

(2) That on isolated Indian jurisdictions superintendents be clothed with the powers of a committing magistrate, with authority to sentence petty offenders to brief terms of incarceration and that simple jails or guardhouses be provided for such jurisdictions.

(3) That in the heavily timbered country of the Northwest, cut-over lands be leased for not less than 8 or 10 years, with provisions in the lease requiring tenants to clear the land so that it will be suitable for agricultural purposes.

(4) That the Board of Indian Commissioners approve the action of the Indian Bureau in prohibiting pagan and other dances which have a degrading influence upon Indians and that the prohibition of such conditions be made even more positive.

(5) That the superintendent of the Tulalip Agency be earnestly supported in his efforts to counteract pro-German influences directed against the loyalty of the Indians on the Lummi Reservation.

Respectfully submitted.

GEORGE VAUX, Jr.

THE BOARD OF INDIAN COMMISSIONERS.

## APPENDIX R.

REPORT ON THE MORAL CONDITIONS ON RESERVATIONS, BY  
WILLIAM H. KETCHAM.OKLAHOMA CITY, OKLA., *June 3, 1918.*

SIR: I have just finished a series of inspections of Indian schools and reservations in Oklahoma, Idaho, Washington, Oregon, California, Nevada, and Arizona, which began in March last, and submit the following as my report:

The jurisdiction visited and the dates of the visitations are as follows: The Seminole Nation, Okla., March 13-16; the Cayuse, Umatilla, and Wallawalla Indians, Umatilla, Oreg., March 23-25; the Nez Perce Indians, Fort Lapwai, Idaho, March 26-28; the Coeur d'Alene and Kootenai Indians, Coeur d'Alene, Idaho, March 29-April 2; the Warm Springs, Des Chutes, Paiute, and Wasco Indians, Warm Springs, Oreg., April 4; special meeting of the board, Portland, Oreg. (which included a visit to the Salem Indian School, Chemawa), April 8-14; the Cow Creek, Rogue River, Kalapuy, Shasta, and other Indians, Grande Ronde, Oreg., April 20-21; the Coquilla, Kwatami, Umpqua, and other Indians, Siletz, Oreg., April 20-21; the Klamath, Modoc, Walpape, and other Indians, Klamath, Oreg., April 28-30; the Paiute and Washoes in and around the Carson Indian School, Yerington and Walker River Reservation, Nev., May 6-7; the Yuma and Cocopah Indians, Yuma, Ariz., and California, May 18-21; the Pima, Maricopa, and Apache Indians, Salt River, Ariz., May 23; the Phoenix Indian School, Phoenix, Ariz., May 26; and the Apache Indians, San Carlos, Ariz., May 28.

Some matters which required immediate attention I took up with the Indian Office by telegrams and letters, and I will not include them in this report. After the Portland meeting I accompanied Chairman Vaux on a joint inspection of the Cushman School, Tacoma, and schools under the Tulalip and Lummi jurisdiction, Washington.

## INCREASE IN IMMORALITY.

In the beginning of this review of my field work I desire to center the attention of the board upon the appalling increase in immorality among the Indians on some of the reservations I visited. In common with other members of this board I have been painfully impressed for some time with the growing tendency toward moral laxity of a large number of our Indians who, but a short generation ago, were sturdy advocates of pure manhood and chaste womanhood. The contrast between the moral conditions of those years and to-day is so strong that there is good ground for the statement that unless the evil conditions are righted immediately by law or regulation or both, most of the good work done by the missionaries and the Indian Office for the advancement of the Indians will be lost and the white people of the United States, the guardians of the Indians, will be responsible for another great crime against them. For it is nothing less than criminal for us, the white men and women of this country, to permit the residue of this great race, which was reduced to a mere remnant by, or with the passive acquiescence of, our people to degenerate into a state of immorality and irreligion.

It is almost incredible that on one side of a barb wire fence, the boundary line of an Indian reservation, white men and women who are living together in loose sexual relations can be and are punished under the laws of the State while on the other, the Indian side of the fence, the superintendent of the reservation, the authorized agent of the United States Government, sees the vilest sexual practices going on under his very eyes and can or will do nothing to stop them. Yet that is exactly the situation in some parts of this land.

It is not necessary to my purpose, which is to start a "drive" against this growing evil, to name any particular reservation where immorality is prevalent. Congress, the Indian Office, the Board of Indian Commissioners, the Lake Mohonk Conference and the courts of the land are cognizant of the facts which I present herewith. Somewhere along the line of Federal activities in the administration of Indian affairs, beginning with Congress and ending with the reservation superintendent, there is a defect which seriously weakens, if it does not completely nullify authority to punish offenders, white and Indians, against the moral and marriage laws on reservations. Just where that weakness or omission or neglect is I do not know at this time.

#### OFFICIALS NOT OF ONE MIND.

Inquiries made by me on my trip and through the board's office at my suggestion have developed the following: Superintendents in some States are of the opinion that they have no power to procure the arrest and punishment of violators of the moral laws whether they be citizen or noncitizen Indians; other superintendents, in the same States, hold there is no conflict between Federal and State laws which operates to prevent them from securing punishment for moral lawbreakers; some States and counties do not attempt to correct immoral evils by the prosecution of offenders; there seems to be no Federal statutes which cover moral transgression on reservations; one superintendent wrote that it was not deemed best to call in the aid of State courts because "if we permit the State courts to have jurisdiction the Indians would, in a short time, lose everything they possess."

Taking into consideration the several court decisions bearing on the enforceability of State laws on Indian reservations there probably is some justification for the varying views held by superintendents and other Indian officials on this important question. I have in mind two reservations in the same State, both of which I recently visited, on one of which the superintendent has enforced, through punishment when necessary, a decent observance of the marriage and divorce laws of the State, while on the other the superintendent told me he had no authority to enforce such laws.

The later superintendent said he could not secure correction and punishment of citizen Indians who violate the marriage and divorce laws of the State, and I feel sure he does not support his Indian court in prosecuting and punishing promiscuous cohabitation on the part of his noncitizen Indians. Now, this difference between two jurisdictions in the same State raises the question, "Does the first

superintendent exceed his authority or is the second superintendent negligent or indifferent?" Both of them stand well as superintendents; both seem to be good, well-meaning, conscientious men.

Viewing the situation as a whole, I am forced to the conclusion that Congress, the Indian Office, and too many, I fear, of the superintendents must jointly bear the responsibility for the promiscuous immorality which is degrading the Indians on many reservations. Congress enacted an antiliquor law so drastic in its provisions that it enabled the Indian Office to carry on its most praiseworthy campaign against illicit traffic in liquor so successfully that many jurisdictions are almost 100 per cent dry.

#### NEED OF FEDERAL LAWS.

I am unable to understand why Congress, then, can not pass laws which will enable the Indian Office, through its superintendents, to quickly put a stop to the immoral practices I have referred to. If Congress can put on the statute books a law which sends to the penitentiary for a number of years, through the Federal courts, a man who is convicted of the illicit introduction of liquor into a reservation, I do not understand why Congress can not enact laws which will severely punish a man or woman, or both, white or Indian, married or unmarried, who indulges in illicit sexual practices on a reservation.

Inasmuch as there seems to be considerable confusion in the minds of the superintendents and others in the Indian Service as to laws, authorities, rights, and regulations in respect to the nonobservance of marriage, divorce, and moral laws on Indian reservations, I strongly recommend that the Board of Indian Commissioners at once begin a comprehensive survey of this whole problem with the purpose of laying before the Secretary of the Interior information and conclusions on which he may, if he so desires, base recommendations to Congress to the end that our Indians be redeemed from the low state toward which they surely are tending.

And this survey should include close inquiries into the relations which white men who live near Indian reservations and communities sustain toward Indian women. There is abundant evidence to prove that many white men regard Indian women, particularly young girls, as their rightful prey. I sometimes think that missionaries to the Indians should move out of the reservations into the neighboring white communities, for it is there where most of the evils caused by whisky and immorality have their source.

My personal opinion is that nothing short of Federal legislation which has claws to it will be effective to overcome this growing evil of immorality and disregard of marriage and divorce laws on reservations. The earnest efforts of devoted missionaries and conscientious superintendents to combat these evils seem to be futile. The white communities near Indian centers, instead of being what they should be, sources of good influence and encouragement for the Indians, too often are the contrary. The Government, which protects its Indians from the bootlegger and illicit whisky peddler, should protect the wives and daughters of its Indians from the beastly passions of white men,

## THE SEMINOLE NATION.

As I do not consider it necessary, I shall not attempt in this report to go into much detail in setting forth my observations and conclusions. I visited the Seminole Nation, in Oklahoma, to learn what had been accomplished by the special inspector of the Secretary's office who had been sent there at my request to inquire into conditions. I interviewed a number of prominent Indians and went with Field Clerk Archert to address a "good crops" meeting at the Methodist Church building in Sylvan. The work of inspecting and improving Seminole conditions should be uninterruptedly pushed on. A trachoma specialist should be detailed to this tribe for trachoma is becoming more prevalent. A hospital is needed and if the courts hold that the Seminole school plant at Emahaka, which now is a subject of litigation, belongs to the Seminoles the building, with some improvements and modifications, would make a good hospital.

## CONDITIONS AT UMATILLA.

On the Umatilla Reservation I visited, with the superintendent, St. Andrews (Catholic) Mission, the Presbyterian Mission, the Government boarding school and many Indians in their homes and held a council with the Indians. The boarding school at this place is to be abandoned and the superintendent wants the plant turned into a hospital. I strongly favor this. Some of the Indians, however, object and they should be given a full hearing in the matter, so that their reasons in opposition may be heard. With certain concessions they possibly may be won over to the hospital project.

It seems that some of them object to having sick people brought in on the reservation and they also claim that the land in question not only is most valuable for wheat but the acreage is not required by a hospital. There is no finer wheat country in the United States than the Umatilla reserve. Some of the Indians complain that the superintendent, in making leases of wheat land, is favoring large wheat growers and thereby discouraging the Indians as small wheat growers. The superintendent, in answer to this complaint, urges the necessities of the war and the need for as great a yield of wheat on as large an acreage as possible.

The Indians, financially, are well off but morally they are rapidly deteriorating. One reason for this is the annual "round up" at Pendleton where the fair attracts an indiscriminate crowd from all parts of the country and where there is whisky and gambling and every influence to pull down the Indian. The great evil on this reserve is the disregard of marriage by the Indians, which is becoming prevalent. The superintendent, who seems to be a good, efficient man, is one of those who feels that he can not secure the conviction and punishment of citizen Indians who violate the marriage laws.

Apparently he does not look upon his Indian court as an effective agent for correcting the misdemeanors of his noncitizen Indians, for he has not rebuilt the reservation jail, which was burned down several years since. I would strongly suggest that a jail be built for this reserve and that the superintendent make every effort to instill more energy into his Indian court. As for the citizen Indians, I am

strongly of the opinion, as I have stated before, that some Federal legislation should be obtained that will enable the Commissioner of Indian Affairs to deal summarily with offenders against decency and immorality just as he does with whisky cases.

#### THE NEZ PERCE INDIANS.

The Nez Perce Indians at Fort Lapwai, Idaho, in some respects have made very remarkable progress. They are all citizens, however, and the same marriage evils and defiance of all decency and morality exist here as at Umatilla, but in a more accentuated degree. Nothing but a Federal statute can cure the evil here, and it should be enacted at the earliest possible moment. At a tribal council which I was invited to attend a large number of Indians were present. This meeting was called to protest against the sale of some of their timber without first consulting them, although it appears the Indian Office had at various times brought the matter to the attention of some of them. They criticized the department for not conferring with them before advertising for bids for the purchase of the timber.

They declared they never know what becomes of their money, and that no statement or account of their financial affairs ever is rendered to them, and as they are citizens they are entitled to a voice in the handling of their affairs and to full and specific accounts of the condition of their finances.

In the event their statement is correct I think they are right, and I strongly suggest that every year, on every reservation, there be posted in some conspicuous part of the superintendent's office an authorized statement, which will give the Indians the knowledge they desire and are entitled to of how their tribal accounts stand on the books of the Indian Office.

The hospital on this reserve is doing good work, although some new buildings and various improvements are needed. I was particularly pleased with the open-air school. The teachers understand their business.

#### COEUR D'ALENE AND KOOTENAI.

The Indians on the Coeur d'Alene Reservation in Idaho had made the most remarkable progress in industry and civilization and had reached a high state of morals without any particular attention from the Government. The springing up of towns around the reservation, however, with the rough element attracted during the boom days and the "fire water" which flowed freely from the new settlements, wrought havoc among the Coeur d'Alene. Drunkenness and violence are rampant despite the superintendent's efforts to conserve order, and marriage, once held sacred by the Coeur d'Alene, is, because of lax discipline, becoming a negligible quantity in the morals of the reservation.

Murder, adultery, and drunkenness, if not checked, will destroy this people. Since several murders have taken place, and, as I was told, in several instances no steps have been taken to find the culprits and bring them to justice, I urge that the Commissioner of Indian Affairs send his best secret-service men to run down the criminals



and have them prosecuted. It is possible that when prohibition becomes effective in the neighboring State of Montana conditions among the Coeur d'Alenes as regards drunkenness may improve.

The agency is located near the geographical center of the reservation but remote from the bulk of the population. It is incredible that such a false step as placing the agency where it is should have been made by any right-thinking official. The reservation physician retains his residence at De Smet, where all the Indians are assembled at least four times a year, where each family has a residence, and where usually the sick are brought not only for medical aid but for spiritual attention. De Smet, the physician tells me, is near to 80 per cent of the population.

Yet every effort has been made to induce the physician to move his residence to the agency, away from the bulk of his people. At De Smet also there is a hospital conducted by the Sisters of Charity of Providence. The physician is not supplied with adequate means for traveling, neither an automobile for summer nor a sledge for winter, and the house, if such it can be called, in which he and his family are compelled to live is not fit for cattle, much less for human beings. I strongly recommend that the agency physician not only be properly housed at De Smet, where he should live, but that he be provided with adequate transportation facilities.

It will be seen this reservation furnishes another reason for a Federal statute covering Indian marriages. As the Coeur d'Alene are not citizens, the matter might be handled by the Indian court, if one such as existed in former years were maintained. The chief asked me to have some good policemen appointed to assist him in keeping order. I was advised by the missionaries that white policemen would do better on this reservation than Indians, as the Coeur d'Alene policemen are often afraid to make arrests.

The Kootenai settlement near Bonners Ferry and day school seem to be ideal. The Kootenai are good Indians, but have not reached the state of progress where they speak English. The day-school teacher, Mr. Fisher, and his wife and the contract physician, Dr. Frye, who lives in Bonners Ferry, are doing excellent work. They want an appropriation to give the village a good water supply and to put up comfortable cottages. This appropriation seems to be their sole need.

#### WARM SPRINGS RESERVATION.

Because Supt. Reynolds, of Warm Springs Reservation, in Oregon, lay critically ill at the time of my visit, I only stayed at Warm Springs one day. From what I saw I judged that Supt. Reynolds has not been afraid to shoulder the responsibility of compelling the Indians under his charge to observe moral decency. His Indian court amounts to something, and good order seems to prevail on the reservation.

The land of this jurisdiction is very poor and is adapted chiefly to stock raising. The little valleys could be irrigated, and this should be done. Timber is the one asset of the Indians. Enough of it should be disposed of to stock the reservation, or a reimbursable appropriation, with the timber as security, should be provided for this purpose. The school impressed me as being very inferior.

Since the Roseburg (Oreg.) Agency has been discontinued part of the scattered Indians—those around The Dalles and certain other places—formerly under the supervision of the Roseburg Agency, have been placed in charge of the Warm Springs superintendent. I was told this extra responsibility can not be properly handled by the superintendent because of lack of time and clerical assistance and the inaccessible location of Warm Springs.

#### GRAND RONDE AND SILETZ.

The Grand Ronde School is under the jurisdiction of the superintendent of the Siletz Reservation, Oreg. The Government farmer, who is a member of the tribe, is the sole representative of the Indian Office at this place. Practically all that he has to do is to give out aid to several old, dependent Indians. The best of order prevails here, so that no supervision is needed.

If the rank and file of the population are considered, Grand Ronde is the most thoroughly civilized Indian jurisdiction I ever have visited. Its one need is proper medical attention, and I would suggest that the Indian Office make an arrangement for a contract physician for this place. The distance of the Indians from a qualified physician renders it practically impossible for them to afford the services of a doctor in cases of emergency. As a consequence they are at the mercy of a Chinese, who practices his arts according to the manner in vogue in the Celestial Kingdom. Siletz has a resident physician, and conditions there are quite similar to those at Grand Ronde.

#### THE KLAMATH INDIANS.

I was on the Klamath Reservation, Oreg., for the best part of three days, and was shown over a portion of this finely timbered country by the forester, and saw two of the day schools and one of the saw-mills in company with the superintendent. The agency boarding school which I inspected is badly run down so far as the buildings are concerned. This school either should be greatly improved or abandoned.

The Klamath Indians are forceful and intelligent and many show competency in a marked degree. I found them much concerned because of reports that the \$400,000, carried in the Indian appropriation bill to purchase cattle for this reservation, would not be used for that purpose at once. The Indians firmly believe that the cattle lessees of the reservation had used their influence to postpone the purchase of cattle so that they, the lessees, could continue the use of the cattle range for a longer period. I attended a council called for the purpose of considering the disposition of this \$400,000, the sale of the timber and the accounting of the timber money by the Indian Office. I forwarded to our secretary a stenographic report of the proceedings of this council.

I telegraphed the board's secretary asking him to ascertain if the \$400,000 in question was to be used at once for the purchase of cattle for the Klamath Indians and he wired me that the Indian Office, anticipating the passage of the bill, already was preparing the advertisements and other necessary papers to purchase cattle as soon as the money became available. These Indians should annually be

supplied with a complete financial statement by the Indian Office so that they may know just what was realized from the sale of their timber and just how the money has been or is to be expended. They suspect graft, and so would white men under like conditions. The timber belongs to the tribe and the tribe has a perfect right to know what is being done with its property. Besides, such a statement would do much toward heading off criticisms and complaints and would make the very unpleasant lot of the superintendent more tolerable.

#### PAIUTES OF NEVADA.

The Paiutes, the so-called landless Indians of Nevada, who were the subjects of a comprehensive survey made by Commissioner Smiley and Secretary McDowell last year, and whom I saw during my trip through western Nevada, know nothing whatever about morals and the rough contingent of whites in that part of the State would hardly permit them to observe any morals even should they receive primary instructions in them. Missionary work among these poor Paiutes has been a dismal failure. Good strong law for and effective missionary work among such white people as use these Indians for their personal gain and low pleasure, followed up by earnest missionary work among the Indians are about all that I can suggest for the Paiutes of Nevada. I visited a little settlement of Paiutes on the outskirts of Yerington for whom the Government has purchased a little plat of land and built homes. The field matron here, under great difficulties, is doing good work.

I visited the Carson School and found some improvements. The farming feature is being brought to a marked success and the school is the center of good influence for this section. The improvements recommended by Commissioner Smiley in his report are needed sorely. I was pleased with the evidence of progress I found on the Walker River Reservation. The superintendent is efficient and the little day school a delight.

#### YUMA AND COCOPAH INDIANS.

On the Yuma Reservation, in California and Arizona, I found a thoroughly competent, earnest agent, the Indians industrious and busy, making homes and profiting by the irrigation supplied them by the Government. I went over the reservation, visited the boarding school at Fort Yuma and a day school, built by the Indians themselves in Arizona off the reservation near the Mexican border.

I also visited the Cocopahs, on the Arizona side. One band of these Indians has taken the land which the superintendent offered them and he has opened a day school for them. Another band, which still refuses the offer for land, I made a desperate effort to get acquainted with in the hope that later I might help persuade them to accept the land and settle on it.

#### SALT RIVER AND SAN CARLOS.

My visit to the Salt River Reservation and the McDowell sub-agency was in the nature of a "follow up." This reservation was the subject of a report by Commissioner Eliot and Secretary McDowell

last year. The McDowell Apaches still refuse to move down on the irrigated lands at Salt River. It is said there is an outside influence which tends to keep the McDowell Apaches up on the Verde River.

On my way home I stopped off at San Carlos Reservation, another "follow-up" visit, for Commissioner Eliot and Secretary McDowell made a report on this jurisdiction last year. Mr. Terrell, the new superintendent, is a good stockman who has a heart for the Indians and he urged especially the carrying out of Commissioner Eliot's recommendations regarding missionaries and a hospital. I found that the pumping facilities for irrigation, the need of which was emphasized by Commissioner Eliot, had been provided by the irrigation division of the Indian Office.

#### RECOMMENDATIONS.

In conclusion I desire to summarize some of my recommendations.

(1) That a comprehensive survey of moral conditions on Indian reservations be made by the board to provide the Secretary of the Interior with information on which he may, if he desires, base recommendations to Congress for legislation which will give superintendents the authority to prosecute and procure punishment for violations of marriage, divorce, and moral laws on reservations.

(2) That the Commissioner of Indian Affairs require superintendents annually to furnish Indians under their charge with a statement of the conditions or tribal lands and monies, as shown by the books in the Indian Office.

(3) That the boarding school plant at Umatilla be made into a hospital.

(4) That the Commissioner of Indian Affairs send a secret-service man to the Coeur d'Alene Reservation to obtain information which will lead to the arrest and conviction of unpunished murderers.

(5) That the agency physician on the Coeur d'Alene Reservation be provided with a good home and adequate means of transportation.

(6) That a contract physician be provided for Grand Ronde.

Respectfully submitted.

WILLIAM H. KETCHAM.

HON. GEORGE VAUX, Jr., *Chairman.*

#### APPENDIX S.

##### REPORT ON THE ST. REGIS INDIANS OF NEW YORK, BY WARREN K. MOOREHEAD.

ANDOVER, MASS., *October 13, 1917.*

DEAR SIR: I have the honor to report upon the condition of the St. Regis Indians of northern Franklin County, N. Y.

These Indians occupy a reservation 6 miles square lying along the St. Lawrence River, northern New York. In the tract is included the town of Hogsburg and the small settlement of St. Francis. Through the town of St. Francis passes the boundary line between the United States and Canada, and Indians are continually passing back and forth from one side of the line to the other.

These Indians number at the present time between 1,400 and 1,500. I am informed by the chiefs that the exact population can not be determined for the reason that many of the Indians claim residence on both sides of the border.

On my arrival at Hogansburg I went to a large store where most of the Indians trade, and there met 10 or 15 men and women. I established headquarters at Murphy's Hotel and was visited by numbers of Indians during my stay on the reservation.

#### EDUCATIONAL MATTERS.

There is little to say in regard to education. The Catholic sisters maintain a flourishing institution for young girls. There is a large public school conducted by Mr. Ellis, who represents the department of education, State of New York. So far as the education of the children is concerned both Indians and whites agree that the facilities are ample. There is no discrimination against Indian children.

I talked with white persons in business or in professions, but did not call upon the teacher, Mr. Ellis, against whom the Indians made some complaints. As he was in close touch with Dr. Hill, who is head of the educational department under which these Indians come, I preferred to get the Indians' point of view.

I visited the residence of Louis Solomon, who is an hereditary chief; that is, according to old Iroquois custom he is chief, for the reason that his grandfather and father were both chiefs. The progressive Indians believe in election, and, therefore, Tom Curley Head, Thomas Ransom, Mr. White, and one or two others were duly elected last spring to represent the Indians. Mr. Solomon called in one or two old Indians, who appeared to be full bloods, and we spent two or three hours discussing their complaints.

#### LAND LEASE.

Mr. Solomon's chief complaint is that the white citizens of Hogansburg now control 2,000 acres of land. He claims this land was secured from the Indians on a long lease; that the lease has expired and the Indians wish to regain their property. He says the Indians believe there is no written authority in existence to-day for the occupation of this land by the white people. Solomon and his associates claim that a man named Hogan (for whom the town is named) got the land from the Indians years ago.

Mr. Solomon protests because there is a head tax of \$8 on Indians who come from the Provinces of Quebec or Ontario into New York State to work. He said these Indians often come to visit relatives and not to work, yet they are compelled to pay \$8 and also pay a fee of about 60 cents for passes to go back and forth, and that it is necessary for an Indian to secure a pass and pay this fee if he remains but a day on that side of the border opposite his home.

#### DUTY ON SWEET GRASS.

He and his associates object to the duty on baskets and sweet grass. The women make large numbers of baskets, headpieces, and other articles out of Canadian sweet grass. If they were permitted to import \$20 worth per capita free of charge it would afford them

great relief. The Indians have very little ready money and the imposition of this duty on the grass and baskets compels them to mortgage future profits with the storekeepers. Thus they have to pay a high rate of interest as well as duty. Previously they were permitted to pass back and forth across the line without hindrance. He claims that it would work no injury to the white people were the Indians permitted to bring in their small quantities of baskets and grass free of charge, that the industry is not extensive, but that it means a great deal to the Indians.

#### MORAL CONDITIONS.

I talked with a prominent judge in Malone concerning moral conditions on the reservation. He is in a position to know and states that the Indians, as a rule, are as moral as the class of white people surrounding them. Merchants in towns near the reservation say there used to be considerable drunkenness and fighting. The past year there has been a large camp composed of laborers working on the State highway some 10 miles from the reservation. The number of Italians, negroes, and others employed is less than the Indian population. It is interesting to note that there have been more murders, assaults, and other crimes in this camp of workmen than has occurred on the reservation during the past three or four years.

The few remaining full bloods and Indians who are inclined to keep up old customs state that moral conditions are now good and there is very little drunkenness. Most of the towns near the reservation are now forbidding the sale of liquor, and it is difficult for the Indians to procure intoxicants. The judge made a protest against a local hotel four years ago and the New York authorities prosecuted the hotel man for selling liquor to Indians.

I called upon Rev. Louis Bruce, an educated Iroquois, who is pastor of the Methodist Church. He belongs to the progressive party and does not recognize Louis Solomon as hereditary chief, but he confirms what Solomon said with reference to the town of Hogsburg being built on Indian land. He said they do not know nor can they ascertain the terms on which white people are living on this tract of 2,000 acres. Bruce contends that the Indians are under the State of New York jurisdiction and not controlled by the Interior Department of the United States Government.

#### INDIAN STOCK RAISERS.

I took several Indians in my automobile and went over the reservation, looked at the land, inspected houses, and found the Indians living comfortably and in far better condition than many of our western tribes. Many of them own considerable stock and bring a great deal of milk into the local creamery. Five of the Indians own automobiles and a number of individuals possess as high as 400 and 600 acres of land, and tracts of 200 and 300 acres are common. Most of this land is farmed and the people, as a whole, appear to be progressive and self-supporting.

I visited the home of Mr. Ransom, one of the elected chiefs, and also called upon Moses White, who went about the reservation with

me. Loran Jackson told me there is a strip of land across the Raquette River, and also on this side of the Raquette River, upon which Canadian Indians are living. This land is on the American side, but it is claimed by the Canadians who are living upon it. There are several Canadian families living on the American side, and it is said these Indians also have farms on the Canadian side.

Mr. Bruce's church is more or less of a mission. He thinks conditions fairly satisfactory and that the Indians as a whole compare favorably with white people as to morals, etc.

The Indians are quite unanimous in their desire that an inspector or special agent come up and spend two or three weeks with them and make a thorough investigation. They contend there are Canadian Indians living on this side of the line who claim various tracts of land. The presence of these Indians causes some friction. It seems to me that the matter should be looked into further.

#### THE COUNCILS.

At 2 o'clock on the afternoon of October 4 a council was called by the elected chief of the progressive party. This was held in a long, narrow building of modern construction, but patterned after the famous old "long house" of the Iroquois. The building is known as Foresters Hall. Seventy-two Indians were present, and the chief, Peter Loran, presided.

Representing the Board of Indian Commissioners, I made an address of some length in which I asked these Indians to be perfectly frank and to tell me their troubles. I asked them whether they desired citizenship; took up the question of distribution of the fund from which their annuity money comes; what should be done with reference to the Canadian Indians, and other matters.

The Indians seemed well pleased, and about a dozen of the leading men spoke during the two hours. My address was interpreted into Iroquois by Moses White. All the responses were put into English by Mr. White for my benefit, as the older Indians preferred to speak Iroquois rather than English. They agreed to make for me a copy of all their treaties, agreements, and other papers in their possession. It is interesting to observe that some of these papers have been carefully preserved by the chiefs for over 100 years and are still on the original parchment. It is important to have copies of all of these and I made arrangements to have copies written.

The replies of the Indians need not be set down in detail, but I shall make of them a summary. They do not want an agent. The present agent, they said, from Salamanca, comes over about once a year and pays them \$1.32 each. He brings the clerk with him. They say he is paid about \$300 a year out of their money and he never visits them. The Indians claim that the State pays a doctor to render them medical attention, but that he has refused to visit the Indians on several occasions. Louis Lazone claims that the doctor refused to come to his house when his mother was very low, and that she died without medical attention. This case should be investigated.

The Indians claim that nobody has visited them on any State or National business for 10 years. Mr. Curly Head, the chief, claims that the agent talked with him twice, about five minutes each time.

I questioned the assembly of Indians in regard to their complaints against their school-teacher, for several Indians before the meeting had told me that he was too severe in punishing the children. Several of those in the assembly made speeches confirming these statements. The Indians, from what I learned, want another teacher in his place; but as this is distinctly a State matter, I merely mention it as one of the complaints they urged me to consider.

#### DIVISION OF LAND.

There seems to be some feeling with reference to the division of land. Many Indians, it appears, have too much land and others have none. The Indians themselves think that those who are land poor should be permitted to obtain by purchase land from the more wealthy Indians.

Loran Jackson, a prominent man, brought up for discussion the matter of the Canadian Indian owning property. Several of them have 200 and 300 acres each upon the American side. These Indians belong in Canada and should live upon their own farms in that country. They demand of the American residents twice the price of the value of the land when the American St. Regis Iroquois attempt to purchase. It was suggested that the Board of Indian Commissioners and Commissioner Duncan C. Scott, of Canada, take up the matter and attempt to settle it satisfactorily with the Indians.

The council petitioned that the duty on sweet grass and baskets be removed.

#### TWO INDIAN PARTIES.

It transpired that there were two factions, or parties, on the reservation. Therefore to placate both sides I held another council near the Canadian line in an old building which the Iroquois had used for some time. This council was presided over by Louis Solomon and attended by more full-blood Indians and Canadian Indians than the first meeting. There were 60 present.

I delivered another address and the Indians responded at considerable length. They substantiated all the statements made by their brothers in the Hogansburg council. There were two differences of opinion. First, the old Indians believe that the treaties should be preserved and kept and do not like modern conditions. Second, that their friends who live in Canada are not objected to by the full bloods, since they are all Iroquois. But ownership of American land by Canadians is objected to by the progressive element. They gave the same testimony with reference to lack of medical attention and the desire for a change in school-teachers.

I am happy to say that both factions agreed to cooperate, and we all parted good friends.

In conclusion I desire to say that I agree with the contentions of the Indians, and trust their complaints will receive prompt attention and action.

Respectfully submitted.

WARREN K. MOOREHEAD.

HON. GEORGE VAUX, Jr., *Chairman.*





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**REPORT OF THE SUPERINTENDENT FOR THE  
FIVE CIVILIZED TRIBES**

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# REPORT OF THE SUPERINTENDENT FOR THE FIVE CIVILIZED TRIBES OF OKLAHOMA.

DEPARTMENT OF THE INTERIOR,  
UNITED STATES INDIAN SERVICE,  
OFFICE OF SUPERINTENDENT FIVE CIVILIZED TRIBES,  
*Muskogee, Okla., September 18, 1918.*

SIR: There is transmitted herewith my annual report for the fiscal year ended June 30, 1918, accompanied by the annual reports of the supervisor of Indian schools for the Five Civilized Tribes and the mining trustees of the Choctaw and Chickasaw Nations.

## INTRODUCTION.

There are 101,506 enrolled members of the Five Civilized Tribes. It is estimated that between one-fourth and one-third of this number have died. Children born since March 4, 1906, are not enrolled. It is believed that the births have equaled, if not slightly exceeded the deaths, consequently the number of persons entitled to consideration in one way or another in the administration of the affairs of the Five Civilized Tribes is substantially the same from year to year.

The right to enrollment was based upon the tribal relation of blood, intermarriage, freedman, or adoption. Allotments of lands were made to enrolled individuals with a restriction against alienation for a period of years. Subsequent acts of Congress have removed in part this restriction and authorized the Secretary of the Interior to make further removals. This restriction has been thus removed from approximately 75 per cent of the allotments.

Under the act of Congress approved May 27, 1908, the restriction against alienation was removed from the allotments of all enrolled members of less than one-half Indian blood. For convenient reference the members enrolled as one-half or more Indian blood are considered restricted and those of less than one-half and no Indian blood unrestricted, the restriction having reference to the status of the allotment whether or not every part thereof is alienable with or without the approval of the Secretary of the Interior. Approximately 25,000 enrolled Indians of the Five Civilized Tribes are therefore restricted. There is also a question as to whether or not all minor children of enrolled members, regardless of their quantum or lack of Indian blood, are under a Federal restriction as to the disposition of their allotments or inheritances of land. Unenrolled children of enrolled restricted Indians are undoubtedly Indians, but no law or rule has been made to determine their quantum of Indian blood; however, their education and inherited property interests are considered and such service as may be indicated is rendered them in the same manner as if they were enrolled restricted Indians, consequently the responsibilities and activities of this office are directly in the supervision of the individual affairs of thirty odd thousand restricted Indians, the distribution of tribal moneys to the unrestricted members of these tribes and the rendering to thousands of

members both direct and indirect assistance, counsel, and advice involving their interests both in Federal and State courts.

The Indians of the Five Civilized Tribes are citizens of the State of Oklahoma and of the United States. With few exceptions they are subject to all the laws of the State as are other citizens thereof; the principal and practically only material exceptions being as to the sale and taxation of restricted allotments.

In my annual reports for the fiscal years 1915, 1916, and 1917 I set out in considerable detail the plan of organization, responsibilities, and activities of this office. For the sake of brevity they are not herein repeated except insofar as to show the accomplishments during the past year and the present status of the work.

The activities of this office during the fiscal year 1918 are outlined under the several divisions as follows:

### LAND DIVISION.

This division handles all matters pertaining to enrollment, allotment, and sale of lands and property of the Five Civilized Tribes, having charge of all records thereof.

There are 101,506 persons entitled to participate in the distribution of land and money, 78,101 being citizens by blood, adoption, or intermarriage, and 23,405 freedmen. Complete allotments of land or payments of money have been made to all enrolled except seven Chickasaw freedmen who have not been located and four Creek citizens whose application for certain land awaits decision of court as to the rights of others having claim thereto.

There are contained in the Five Civilized Tribes a total of 19,525,966 acres of land, of which 15,794,208 acres have been allotted, 3,558,165 acres sold, 139,284 acres reserved for townsite and other purposes, 11,695 acres in the Choctaw Nation withheld for a proposed game preserve, and 7,639 acres in the Choctaw Nation withheld for coal-mining lessees, leaving 14,795 acres unallotted and unsold.

Table A shows the enrollment of the Five Civilized Tribes corrected to date.

Table B shows the status of enrollment, allotment, and sale of unallotted land June 30, 1918.

TABLE A.

Nation.	Restricted.				Unrestricted.			Grand total.
	Full bloods.	Mixed three-fourths or more.	One-half to three-fourths.	Total.	Less than one-half including inter-married whites.	Freed-men.	Total.	
Chickasaw.....	1,515	258	708	2,481	3,823	4,062	8,485	10,966
Choctaw.....	7,087	709	1,644	9,440	9,699	6,029	15,728	25,168
Mississippi Choctaw.....	1,357	90	30	1,477	183	.....	183	1,660
Cherokee.....	8,703	1,808	2,975	13,481	23,424	4,919	28,343	41,824
Creek.....	6,858	541	1,157	8,556	3,396	6,809	10,205	18,761
Seminole.....	1,254	133	245	1,732	409	986	1,395	3,127
Total.....	26,774	3,534	6,859	37,167	40,934	23,405	64,339	101,506

<sup>1</sup> This indicates the total number of restricted citizens whose names appear on the approved rolls. The approximate number of restricted citizens who have had the restrictions removed from their entire allotments by the Secretary of the Interior and by death is 13,798, leaving 23,441 June 30, 1918.

TABLE B.—*Status of allotment and enrollment work and sale of unallotted lands on June 30, 1918.*

Tribes.	Enrolled citizens entitled to allotment.	Restricted Indians June 30, 1918.	Average area of allotments. <sup>1</sup>	Area of homesteads.	Area.	Reserved. <sup>2</sup>	Allotted to June 30, 1918.	Unallotted. <sup>3</sup>	
								Sold to June 30, 1918.	Area remaining unsold.
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Choctaw.....	26,828	6,347	320	160	6,953,048	61,008	4,291,036	2,567,210	14,460
Chickasaw....	10,966	1,562	320	160	4,707,903	37,448	3,800,350	870,095	10
Cherokee.....	41,824	8,287	110	40	4,420,088	22,890	4,346,173	50,985	30
Creek.....	18,761	5,936	160	40	3,079,095	16,016	2,997,114	65,612	352
Seminole.....	3,127	1,309	120	40	365,852	1,932	359,535	4,263	122
<b>Total...</b>	<b>101,506</b>	<b>23,441</b>			<b>19,525,966</b>	<b>139,284</b>	<b>15,794,208</b>	<b>3,558,165</b>	<b>14,975</b>

<sup>1</sup> Not including Choctaw and Chickasaw freedmen.<sup>2</sup> Reserved from allotments for town sites, railroad rights of way, coal and asphalt segregation, churches, schools, cemeteries, etc.<sup>3</sup> Including timber lands and segregated coal and asphalt lands<sup>4</sup> This total does not include 167 acres contained in Roebuck Lake and 198 acres contained in Grassy Lake, Choctaw Nation, which were sold for \$320 and \$193.27, respectively.<sup>5</sup> This total does not include 7,639 acres reserved for coal and asphalt lessees, and 11,695 acres of timber land in McCurtain County withdrawn from sale for proposed game preserve in Oklahoma.<sup>6</sup> This total does not include 226 acres contained in Big Lake, which was sold for \$3,842.17, and an island in the Arkansas River containing 24.75 acres which was sold for \$550.

## CHOCTAW AND CHICKASAW NATIONS.

*Allotment and disposition of land.*

Choctaw Nation, area.....	6,953,048
Chickasaw Nation, area.....	4,707,903
<b>Total acreage:</b> .....	<b>11,660,951</b>
Allotted in Choctaw Nation.....	4,291,036
Allotted in Chickasaw Nation.....	3,800,350
Reserved in both nations.....	98,456
Unallotted, timber and surface of segregated coal and asphalt land sold..	3,437,305
Withdrawn for proposed State game preserve.....	11,695
Withdrawn for mining companies.....	7,639
Unsold.....	14,470
<b>Total acreage:</b> .....	<b>11,660,951</b>
<b>Total receipts from land sales.</b> .....	<b>\$19,595,082</b>
Patents delivered during fiscal year:	
Church and school deeds.....	8
Town lots.....	80
Choctaw and Chickasaw citizens.....	59
<b>Total</b> .....	<b>147</b>
Undelivered allotment patents.....	1,320

*Unsold tribal property and estimated value.*

Coal and asphalt deposits.....	\$12,319,000
Tribal school lands and improvements.....	105,000
2,280 town lots.....	45,000
Unsold timber land.....	35,000
Unsold unallotted and surface of the segregated coal and asphalt land..	280,000
Amount uncollected from lands sold, approximately.....	4,000,000
<b>Total estimated value</b> .....	<b>16,784,000</b>

## UNFINISHED BUSINESS.

Disposition of 41,700 acres of the surface of the segregated coal and asphalt land, including land reserved for coal lessees for mining purposes; also the coal and asphalt deposits underlying the entire segregated coal and asphalt area, 7,750 acres of timber land, 5 acres, including improvements, reserved for the Choctaw Council House, 824 acres, including improvements, reserved for six boarding schools, 2,280 vacant and forfeited town lots, collection of balance due on unallotted land sales, and preparation and delivery of deeds thereto; also disposition of all tracts of unallotted land that may be forfeited by reason of nonpayment of principal and interest.

## CHEROKEE NATION.

Allotments or payments of money in lieu of allotments have been made to all enrolled Cherokee citizens, and all of the land and tribal property has been sold, excepting 30 acres erroneously platted as allotted.

*Allotment and disposition of land.*

Area.....	4, 420, 068
Reserved for town sites, etc.....	22, 880
Allotted.....	4, 346, 173
Sold.....	50, 985
Unsold.....	30
Total acreage.....	4, 420, 068
Cherokee deeds delivered fiscal year.....	39
Cherokee deeds undelivered.....	729

## UNFINISHED BUSINESS.

Disposition of 30 acres of land, completion of per capita payments, and settlement of all claims against the nation under the provisions of the act of Congress approved May 25, 1918 (Public, No. 159, 65th Cong.).

## CREEK NATION.

*Allotment and disposition of land:*

Area.....	3, 079, 095
Reserved for town sites, etc.....	16, 016
Allotted.....	2, 997, 114
Unsold.....	353
Sold.....	65, 612
Total acreage.....	3, 079, 095

*Unsold tribal property and estimated value.*

Council building, Okmulgee.....	\$100, 000
124 town lots, Muskogee, Tulsa, and Lee.....	100, 000
Boarding school, Nuyaka.....	16, 650
Boarding school, Eufaula.....	22, 500
Boarding school, Sapulpa.....	30, 000
Unsold land.....	3, 500
Total.....	272, 650
Creek deeds delivered fiscal year.....	3
Creek deeds undelivered.....	600

## UNFINISHED BUSINESS.

Disposition of unallotted land and other tribal property, equalization of allotments, investigation of alleged duplicate and fraudulent enrollments, and determination of suits to recover valuable oil and gas lands.

The proposed sale of the council building at Okmulgee to the city of Okmulgee is under consideration by the department. Recommendation has been made to the department for the sale of the vacant lots in Muskogee, Tulsa, and Lee in the spring of 1919.

## SEMINOLE NATION.

*Allotment and disposition of land.*

Area.....	315,852
Allotted.....	359,575
Reserved.....	1,932
Sold.....	4,223
Unsold.....	122
Total acreage.....	365,852

*Unsold tribal property and estimated value.*

Emahaka Mission School, 320 acres.....	\$8,000
Mekusukey Academy, 320 acres.....	22,400
Unsold.....	1,220
Total.....	31,620
Seminole deeds undelivered.....	420

## UNFINISHED BUSINESS.

Disposition of 122 acres of unallotted land and other tribal property, and distribution of balance of tribal funds to members of the tribe. The Mekusukey School is still being maintained. The Emahaka School has been abandoned for school purposes and litigation affecting the ownership of the school building is now pending in the United States Supreme Court.

## TOWNSITES.

By departmental regulations of September 24, 1917, 133 town lots in Muskogee and Lee, Creek Nation, Oklahoma, were offered for sale at public auction on November 19 and 20, 1917, of which 44 were sold for \$1,222.50.

*Sale of city and town lots, Creek Nation.*

City or town.	Number offered.	Number sold.	Appraised value.	Sale price.
Muskogee.....	91	4	\$750.00	\$770.00
Lee.....	42	40	242.50	452.50
Total.....	133	44	992.50	1,222.50



Payments were completed during the year on 38 lots in the Choctaw, Chickasaw, and Creek Nations, collections thereon amounting to \$1,289.65. Considerable progress has been made with purchasers of town lots in Tuttle, Chickasaw Nation, involved in the compromise settlement made with E. Dowden et al., payments having been completed on 23 lots and deeds thereto issued.

A total of 308 towns, with various additions, have been surveyed and platted by the Government in the Creek, Cherokee, Choctaw, and Chickasaw Nations, and one by the tribal authorities in the Seminole Nation, as follows:

*Towns surveyed and platted.*

Nation.	Number of towns.	Area.
Creek.....	26	16,689.10
Cherokee.....	54	9,531.47
Choctaw.....	98	21,118.77
Chickasaw.....	120	23,797.82
Seminole.....	1	635.00
Total.....	309	65,772.16

The following statement shows the amount received as payment on town lots by fiscal years:

*Receipts from town lots.*

Fiscal year ended June 30—	Creek.	Cherokee.	Choctaw and Chickasaw.	Total.
1900.....		\$74.02	\$11,139.48	\$11,213.50
1901.....		10.02	25,090.91	25,100.93
1902.....	\$30,536.56		157,188.83	237,725.39
1903.....	211,410.22	21,296.40	337,427.21	570,133.83
1904.....	106,479.26	73,568.24	374,574.22	554,621.72
1905.....	105,579.47	139,389.74	541,749.55	786,718.76
1906.....	149,049.53	244,450.74	581,728.65	975,228.92
1907.....	22,701.96	146,582.23	389,589.61	558,873.80
1908.....	21,636.57	93,687.94	249,134.19	364,458.70
1909.....	11,030.82	28,858.05	89,049.20	128,938.07
1910.....	6,844.84	12,837.30	67,396.07	87,068.21
1911.....	21,797.03	11,932.72	99,164.51	132,894.26
1912.....	370.00	372.00	45,023.35	45,765.35
1913.....	100.00		40,238.64	40,338.64
1914.....	181.34	198.00	15,794.15	16,173.49
1915.....		50.00	4,618.16	4,668.16
1916.....			520.96	520.96
1917.....	100.00		1,211.90	1,311.90
1918.....	824.50		465.15	1,289.65
Total.....	738,642.10	773,297.40	3,031,094.74	4,543,034.24

*Unsold town lots.*

Choctaw Nation:	
Vacant lots.....	1,448
Forfeited town lots.....	45
Reserved for coal lessees.....	787
Creek Nation:	
Forfeited lots.....	7
Lots recovered by suit.....	117
Total.....	2,404

There are still pending in the United States district court several suits to recover lots in the Creek Nation alleged to have been fraudulently scheduled.

**AUCTION SALE OF UNALLOTTED, TIMBER, AND SURFACE OF SEGREGATED COAL AND ASPHALT LAND.**

There have been sold in the Five Nations to June 30, 1918, 42,971 tracts containing 3,558,165 acres for \$20,249,032.58, being \$4,505,563 more than the appraised value and at an average of \$5.39 per acre.

During the year there have been held two auction sales of unallotted lands in the Choctaw, Chickasaw, and Creek Nations. From October 15 to October 31, 1917, there were offered for sale in the Choctaw and Chickasaw Nations, 3,736 tracts, including 400 tracts of the surface of the segregated coal and asphalt land suitable for townsite purposes, containing 3,683.76 acres of which 280 tracts containing 2,870.88 acres were sold for \$51,740.01; 478 tracts of the surface of the segregated coal and asphalt land classified as agricultural and grazing, containing 46,240.19 acres of which 416 tracts containing 40,341.97 acres were sold for \$441,039.28; 2,849 tracts of timber land containing 389,947.25 acres of which 2,791 tracts containing 382,937.59 acres were sold for \$2,349,469.01, and 9 tracts of unallotted land containing 453.65 acres of which 8 tracts containing 443.65 acres were sold for \$5,570.15. On November 19 and 20 there were offered in the Creek Nation, 39 tracts containing 2,500.23 acres of which 2,147.73 acres were sold for \$53,917.79.

Immediately following are Tables C, D, E, F, G, H, and I, showing status of the sales of the unallotted land in the Five Civilized Tribes.

**TABLE C.—Sale of unallotted land, Choctaw and Chickasaw Nations, without minimum price.**

[Regulations of July 21, 1917.]

County.	Land offered.		Land sold.				Land unsold.	
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Average sale price per acre.	Number of tracts.	Area in acres.
Le Flore.....	1	76.60	1	76.60	\$766.00	\$10.00	.....	.....
Latimer.....	1	40.00	1	40.00	760.00	19.00	.....	.....
Hughes.....	1	160.00	1	160.00	1,440.00	9.00	.....	.....
Atoka.....	1	40.00	1	40.00	320.00	8.00	.....	.....
Murray.....	2	20.00	1	10.00	42.50	4.25	1	10
McClain.....	2	97.05	2	97.05	1,981.65	20.42	.....	.....
Carter.....	1	20.00	1	20.00	260.00	13.00	.....	.....
<b>Total.....</b>	<b>9</b>	<b>453.65</b>	<b>8</b>	<b>443.65</b>	<b>5,570.15</b>	<b>12.55</b>	<b>1</b>	<b>10</b>

TABLE D.—*Sale of segregated coal and asphalt lands, Choctaw and Chickasaw Nations (agricultural and grazing).*  
[Regulations of July 21, 1917.]

County.	Land offered.		Land sold.						Land unsold.	
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Appraisal, land improvement.	Average appraisal per acre.	Average sale price per acre.	Number of tracts.	Area in acres.
Le Flore.....	144	14,743.20	142	14,577.41	\$135,732.88	\$139,770.03	\$9.58	\$9.30	2	165.79
Hasckell.....	280	25,593.48	222	20,011.91	249,994.33	292,151.22	13.24	12.41	58	5,581.57
Pittsburg.....	16	1,040.92	14	1,024.42	14,794.00	13,562.02	13.23	14.37	1	16.50
Latimer.....	26	3,638.99	24	3,504.63	26,914.90	26,576.96	7.58	7.68	1	134.36
Coal.....	2	198.87	2	198.87	2,357.98	1,513.22	7.60	11.55	.....	.....
Pushmataha.....	6	458.75	6	458.75	2,878.00	5,513.75	12.01	6.37	.....	.....
Carter.....	3	330.98	3	330.98	4,836.20	4,954.70	14.96	14.91	.....	.....
Murray.....	3	235.00	3	235.00	3,580.00	3,870.00	16.46	15.23	.....	.....
Total.....	478	46,240.19	416	40,341.97	441,639.28	457,919.90	11.44	10.90	62	5,868.22

TABLE E.—*Sale of segregated coal and asphalt lands, Choctaw Nation (townsite additions).*  
[Regulations of July 21, 1917.]

County.	Land offered.		Land sold.						Land unsold.	
	Number of lots.	Area in acres.	Number of lots.	Area in acres.	Sale price.	Appraise-ment.	Average appraise-ment per acre.	Average sale price per acre.	Number of lots.	Area in acres.
Pushmataha.....	17	38.74	2	2.64	\$35.00	\$35.00	\$23.57	\$23.57	15	38.10
Le Flore.....	61	402.90	60	372.23	6,401.80	4,940.00	13.27	17.19	11	80.67
Hasell.....	27	288.76	24	232.29	6,155.00	4,640.00	19.97	22.19	3	6.46
Pittsburg.....	161	1,933.06	112	1,421.96	24,620.00	18,560.00	13.33	17.68	49	511.10
Latimer.....	46	302.74	26	297.59	3,040.00	2,620.00	12.62	14.64	17	96.15
Coal.....	88	767.69	63	638.17	12,438.21	9,847.96	19.17	15.18	26	134.40
Total.....	400	3,683.76	280	2,870.88	51,740.01	40,692.96	14.24	18.11	120	812.88

TABLE F.—*Sale of timber lands, Choctaw Nation.*  
[Regulations of July 21, 1917.]

County.	Land offered.		Land sold.					Land unsold.		
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Minimum price.	Average sale price per acre.	Average minimum price per acre.	Number of tracts.	Area in acres.
McCurdin.....	993	130,970.45	990	130,735.24	\$911,017.11	\$636,173.43	\$7.03	\$4.91	3	235.21
Pushmataha.....	838	106,563.71	795	100,803.98	620,967.63	471,230.21	6.13	4.64	43	5,759.73
Le Flore.....	688	104,017.32	677	102,422.60	489,404.96	303,301.53	4.77	2.96	11	1,594.73
Latimer.....	319	47,434.78	318	47,274.78	315,582.86	186,812.13	6.74	3.30	1	1,160.00
Pittsburg.....	11	1,700.99	11	1,700.99	12,466.15	8,719.00	7.34	5.13	.....	.....
Total.....	2,849	390,687.25	2,791	382,937.59	2,349,469.01	1,576,736.30	6.13	4.11	58	7,749.66

TABLE G.—*Recapitulation. Choctaw and Chickasaw 1917 sale.*

Class of land.	Land offered.		Land sold.					Land unsold.		
	Number of lots.	Area in acres.	Number of lots.	Area in acres.	Sale price.	Appraisalment.	Average appraisalment per acre.	Average sale price per acre.	Number of tracts.	Area in acres.
Segregated:										
Timber additional.....	400	3,683.76	280	2,870.88	\$51,740.01	\$40,692.95	\$14.24	\$18.11	120	812.88
Agricultural and grazing.....	478	46,240.19	416	40,341.97	441,039.28	457,919.90	11.44	10.90	62	5,898.23
Timber.....	2,849	389,947.25	2,791	382,197.59	2,349,469.01	1,576,736.30	4.11	6.13	58	7,749.66
Unallotted.....	9	453.65	8	443.65	5,570.15	.....	.....	12.55	1	10.00
Total.....	3,736	440,324.85	3,495	425,854.09	2,847,818.45	2,075,349.15	4.87	6.69	241	14,470.76

TABLE H.—*Creek Nation unallotted land. Regulations of Sept. 24, 1917.*

County.	Land offered.			Land sold.				Land unsold.	
	Number of tracts.	Area in acres.	Number of tracts.	Area in acres.	Sale price.	Minimum price.	Average sale price per acre.	Average price per acre.	Number of tracts.
Muskogee.....	1	30.00	1	30.00	\$1,230.00	\$750.00	\$41.00	\$25.00	.....
McIntosh.....	2	18.98	2	18.98	173.14	9.49	9.12	.....	.....
Hughes.....	20	1,099.40	19	976.90	12,098.89	8,332.65	12.26	8.53	.....
Oklahoma.....	2	212.50	1	52.50	1,128.75	315.00	21.50	6.00	.....
Oklawaha.....	3	210.00	3	210.00	7,520.00	2,375.00	35.80	11.30	.....
Oklawaha.....	10	1,016.85	9	856.85	31,592.51	16,192.15	36.87	18.89	.....
Creek.....	1	2.50	1	2.50	257.50	37.50	103.00	15.00	.....
Tulsa.....	39	2,500.23	36	2,147.73	53,917.79	28,068.79	25.10	13.04	.....
Total.....									3

NOTE.—The two unsold tracts in Oklahoma and Creek Counties were withdrawn from sale by departmental instructions.

TABLE I.—*Status of unallotted land sold in the Choctaw, Chickasaw, Cherokee, Creek, and Seminole Nations, from Nov. 1, 1910, to Nov. 20, 1917, including timber land in the Choctaw Nation and segregated coal and asphalt lands in the Choctaw and Chickasaw Nations.*

Date of sale.	Nation.	Land offered.			Land sold.					Land unsold.	
		Number of tracts.	Area.	Minimum price.	Number of tracts.	Area.	Sale price.	Appraisalment of land sold.	Average appraisalment per acre.	Average age sale price.	Remain- ing tracts unsold.
Dec. 1, 1910, to Oct. 31, 1917, inclusive.	Choctaw and Chickasaw.	38,866	3,462,732	\$16,567,891.39	38,625	3,437,305.09	\$19,596,062.13	\$15,374,754.76	\$4.41	\$5.56	240
Nov. 21, 1910, to May 27, 1916.	Cherokee.	2,859	50,945	250,238.90	2,859	50,985.00	177,745.19	124,646.28	2.43	3.44	2
Nov. 21, 1910, to Nov. 20, 1917.	Creek.	1,431	65,965	225,065.18	1,428	65,612.50	281,846.00	223,983.00	3.52	6.02	3
Nov. 21, 1910, to June 28, 1913.	Seminole.	1,623	4,385	20,106.06	59	4,263.00	40,441.37	20,103.06	4.76	9.57	3
Grand total of Five Nations.		43,217	3,584,087	16,063,330.53	42,971	3,558,166.59	20,249,032.58	15,743,496.10	.....	6.39	248

\* This total does not include 167 acres contained in Roebuck Lake and 193 acres contained in Grassy Lake, Choctaw Nation, which were sold for \$320 and \$193.27, respectively.  
 \* This total does not include 11,946 acres of timber land in McIntosh County, which was sold for a proposed game preserve in Oklahoma.  
 \* This total does not include 235 acres contained in Big Lake, which was sold for \$3,822.17, and an island in the Arkansas River containing 24.75 acres, which was sold for \$650.  
 \* This total represents land involved in suit in the United States court and 2 acres of abandoned school reservations.

There have been sold to date 1,905,139 acres of unallotted land for \$10,625,324; 385,935 acres of the surface of the segregated coal and asphalt land for \$3,328,731; 1,267,821 acres of timber land for \$6,294,977.

The sales were extensively advertised in the principal newspapers in Oklahoma and many of the leading newspapers and periodicals in other States. In addition, the railroads operating in Oklahoma and surrounding States gave liberal and efficient assistance in advertising the sales. Approximately 165,000 circulars, descriptive lists, and other advertising matter were mailed, and posters were sent to every post office having 1,000 population or more.

The result of the sales was most gratifying as 91 per cent of the tracts and lots offered and 96 per cent of the acreage offered were sold, and the average price per acre obtained exceeded that of any previous unallotted land sale. Every tract offered in McCurtain County was sold except 3, and in Le Flore County except 24. All of the unallotted land tracts were sold except one tract located in Murray County and one tract in Hughes County, Creek Nation. Schedules of the sales have been prepared and approved by the Secretary of the Interior, and certificates of purchase have been issued. There have been prepared 9,287 patents, covering 13,931 tracts or lots.

Proper record of payment of the principal and interest has been made, necessitating 76,000 entries, and 65,000 receipts and notices were prepared and mailed.

The following statement shows the payments of principal and interest:

Principal.....	\$4, 623, 190. 46
Interest.....	285, 252. 50
Total.....	4, 908, 442. 96

*Statement of patents prepared for purchasers of unallotted land in the Choctaw, Chickasaw, Cherokee, Creek, and Seminole Nations.*

Nation.	Pre- viously reported.	1918	Total.
Choctaw and Chickasaw.....	12, 169	9, 287	21, 456
Cherokee.....	1, 518	.....	1, 518
Creek.....	962	10	972
Seminole.....	31	.....	31
Total.....	14, 680	9, 297	23, 977

#### AUCTION SALE OF MISCELLANEOUS PROPERTY.

By departmental authority of August 26, 1916, the Bloomfield Academy property in the Chickasaw Nation, consisting of 158 acres of land and several buildings, was offered for sale at public auction on July 7, 1917, and sold for \$5,455, which sale was approved by the Secretary of the Interior August 28, 1917. On March 30, 1918, a small island in the Arkansas River, Cherokee Nation, containing 24.75 acres, was sold at public auction, by departmental authority, for \$550.

## EXTENSIONS OF TIME.

On January 2, 1918, the department authorized an extension of time not to exceed one year to purchasers of timber and unallotted land in meritorious cases, and extended the second installment then due or soon to become due for one year on tracts of the surface of the segregated coal and asphalt land in the Choctaw and Chickasaw Nations. Purchasers were duly notified thereof and approximately 8,000 extensions were granted.

## RECORDING OF PATENTS AND OTHER INSTRUMENTS.

The following statement shows the progress in recording patents, deeds, and other instruments during the year ended June 30, 1918:

Creek homestead and allotment deeds.....	3
Cherokee homestead and allotment deeds.....	15
Church and school deeds.....	9
Town lot deeds.....	80
Unallotted land deeds, Choctaw and Chickasaw Nations.....	5,582
Miscellaneous deeds.....	4
Total.....	5,693

## RENTAL OF THE SURFACE OF THE SEGREGATED COAL AND ASPHALT LAND.

There are 6,710 acres of the surface of the segregated coal and asphalt land and 1,410 vacant Government town lots in the segregated coal and asphalt area that have not been sold, and approximately 35,000 acres of the surface of the segregated coal and asphalt land and the surface of 787 vacant Government town lots in the Choctaw and Chickasaw Nations reserved by coal companies for mining purposes. During the year 908 applications to rent the surface of these lands were granted and \$16,462.15 was collected.

## APPRAISEMENT OF COAL AND ASPHALT DEPOSITS IN THE CHOCTAW AND CHICKASAW NATIONS.

Under the act of Congress approved February 8, 1918, providing for the appraisement and sale of the coal and asphalt mineral deposits underlying the segregated coal and asphalt land in the Choctaw and Chickasaw Nations, Gabe E. Parker, Superintendent for the Five Civilized Tribes, J. George Wright, Superintendent of the Osage Indian Agency, and J. J. Rutledge, of the United States Bureau of Mines, were appointed appraisers to make the appraisement, and regulations to govern the appraisement have been approved by the Secretary of the Interior.

The appraisers upon receiving their appointments immediately proceeded with the work and very satisfactory progress has been made. Maps showing the numbers of the tracts, the location of the leased and unleased area, the mined and unmined area, and coal outcrops and mine openings have nearly all been finished, and the field work is well under way. The work is tedious and complicated, especially that in connection with appraising the leased area, it being necessary to determine as near as possible the amount of coal mined and unmined.

## TRIBAL RECORDS.

Under the provisions of section 13 of the act of Congress approved May 27, 1908 (35 Stat., 312), the Superintendent for the Five Civilized Tribes is custodian of the tribal records of the Choctaw, Chickasaw, Cherokee, Creek, and Seminole Nations. These records are in a very poor condition, and as many persons appear at the office to examine them and many requests are received for certified copies thereof, some provision should be made by Congress to preserve same and make proper indexes thereof.

## CERTIFIED COPIES.

During the year there have been prepared 18,330 certified copies of the records on file in this division, for which was received \$21,360.10.

The following statement shows the number of certified copies prepared and delivered and amount of fees collected therefor:

Character of instrument.	Number.	Amount collected.
Deeds and patents.....	4,858	\$4,858.00
Approved rolls.....	416	104.00
Age certificates.....	326	81.50
Birth and death affidavits.....	1,351	1,351.00
Allotment certificate stubs.....	372	186.00
Census cards.....	4,329	4,329.00
Applications for allotment.....	143	143.00
Proofs of heirship.....	40	40.00
Enrollment and miscellaneous records.....	3,506	8,818.75
Plats of sales and allotments, including blue prints.....	1,933	1,360.95
Post-office addresses.....	879	87.90
Records for official use.....	177	.....
<b>Total.....</b>	<b>18,330</b>	<b>21,360.10</b>

## ILLEGAL CONVEYANCES OF ALLOTTED LAND.

Under the provisions of the act of Congress approved May 27, 1908 (32 Stat., 312), there have been instituted heretofore in the United States District Court for the Eastern District of Oklahoma, 27,517 suits to clear the title to alleged illegal conveyances of allotted Indian lands. Of the suits thus instituted 23,327 had been disposed of prior to July 1, 1917. During the year 1,244 additional suits were disposed of, leaving 2,946 pending.

## ENROLLMENT AND ALLOTMENT LITIGATION—CREEK NATION.

During the year the United States Supreme Court decided the Barney Thlocco case, involving 160 acres of valuable oil land, adverse to the Government's claim, and awarded the land in controversy to the heirs. Decisions were also rendered by the United States Court in the Tommy Atkins and Lettie McGilbra cases adverse to the Government's contentions. Several cases involving the rights to enrollment and allotment of Creek citizens are pending in the United States courts. Four additional cases of alleged duplicate or fraudulent enrollment and allotment have been reported to the department



for consideration. There are still pending at this office 11 cases of this character, requiring additional information before further action can be taken.

#### IMPROVEMENTS ON THE SEGREGATED COAL AND ASPHALT LANDS.

The acts of Congress authorizing the sale of the surface of the segregated coal and asphalt lands and improvements located thereon in the Choctaw and Chickasaw Nations, approved February 19, 1912 (37 Stat., 67), and August 24, 1912 (37 L., 518), provide that upon the expiration of two years after the lands have been first offered for sale, that the surface of the land and the improvements located thereon shall be offered and sold regardless of the appraised value thereof. This limitation expired as to the agricultural and grazing land prior to the October, 1917, sale. At this sale 71 tracts of this class of land containing improvements were sold, and proper adjustment has been made with all of the owners of such improvements except in three cases.

#### CLOSING AFFAIRS OF THE FIVE CIVILIZED TRIBES.

By joint resolution of Congress approved March 2, 1906 (34 Stat., 822), the tribal existence and tribal governments of the Choctaw, Chickasaw, Cherokee, Creek, and Seminole Tribes of Indians, in the Indian Territory, now Oklahoma, were continued in full force and effect for all purposes under existing laws until all property of such tribes, or the proceeds thereof, shall be distributed among the individual members of said tribes unless thereafter otherwise provided by law.

All of the land and tribal property of the Cherokee Tribe has been allotted or sold except 30 acres of unallotted land in two tracts. The only unfinished business is the disposition of these two tracts, completion of per capita payments already authorized, execution of 138 deeds to allottees, and 3 deeds to purchasers of unallotted land, including the two unsold tracts, and settlement of all claims made against said tribe. Section 18 of the Indian appropriation act approved May 25, 1918 (Public, No. 159, 65th Cong.), provides for the filing and settlement of all claims against said nation and authorizes the Secretary of the Interior to expend the tribal funds remaining to the credit of said nation, after the expiration of the time limit therein provided, for building and furnishing an additional dormitory for the Cherokee Orphan Training School near Tahlequah, Okla.

All of the tribal land and property of the Seminole Nation has been disposed of except 122 acres of unallotted land, 120 acres of which is involved in suit to clear the title thereto in said nation, and 640 acres reserved for the Emahaka and Mekusukey tribal schools and improvements located thereon belonging to said nation, the completion of the per capita payments authorized, and distribution of the balance of the tribal funds to the members of said tribe; also to execute a few deeds to allottees and purchasers of unallotted land.

There appears to be no good reason why the tribal governments of these two tribes should not be discontinued. It is possible, however, that a few small tracts of unsold unallotted land may be dis-

covered which will have to be sold and conveyed, or some unforeseen matter of importance affecting said tribes may arise which will require the action of legal representatives of said nations.

Inasmuch as the work in connection with closing the tribal affairs of the Cherokee and Seminole Nations is completed, with the exceptions noted, it is recommended that, by proper congressional enactment, the tribal existence and the tribal governments of said tribes be discontinued, and that the Secretary of the Interior be authorized to execute all deeds to allottees of said tribes and to purchasers of unallotted lands thereof, and to represent and act for and in behalf of said tribes in all matters whatsoever affecting same; also to employ a competent attorney or attorneys, if found necessary, to represent said tribe or tribes and prosecute all matters that may arise affecting same, the attorney or attorneys so employed to be allowed such compensation as may be determined upon by the Secretary, with an allowance for subsistence and necessary traveling expenses during the continuance of his or their services, payable from tribal funds in the United States Treasury to the credit of the tribe or tribes represented by attorney or attorneys.

The unfinished business in the Choctaw, Chickasaw, and Creek Nations, especially in the Choctaw and Chickasaw Nations, as appears from this report, is of such a magnitude, it is believed that it is not now an opportune time to discontinue the tribal governments of these two nations. It is suggested that with reference to the coal and asphalt minerals in the Choctaw and Chickasaw Nations remaining unsold, after first being offered at public auction under existing law, they be sold to the United States or to the State of Oklahoma. This would hasten the closing of the tribal affairs of these two nations. By the close of another year it is probable that the affairs of the Creek Nation will be in such a condition as to warrant the discontinuance of the tribal government of said nation.

#### TRIBAL GOVERNMENTS AND ATTORNEYS.

During the fiscal year ended June 30, 1918, tribal warrants were drawn as shown below for salaries and expenses of tribal officers, attorneys, and other expenses of the tribal governments of the Cherokee, Creek, Choctaw, and Chickasaw Nations.

##### *Warrants issued during fiscal year ended June 30, 1918.*

	Total paid.
Cherokee Nation.....	\$75. 00
Creek Nation.....	18, 212. 88
Choctaw Nation.....	5, 726. 10
Chickasaw Nation.....	14, 543. 53

Tribal officials and attorneys for the Five Civilized Tribes were paid from tribal funds authorized by Congress as follows: Tribal officer of Cherokee Nation, W. C. Rogers, principal chief, Skiatook, Okla.; salary per annum, \$300. Mr. Rogers died the 1st of October, 1917, and as the tribal affairs of the Cherokee Nation are practically closed, no one was appointed to fill his place.

*Tribal officers of Creek Nation.*

Name.	Period in office.	Title.	Post-office address	Salary per annum.
Moty Tiger.....	July 1 to Sept. 30, 1917.	Principal chief.....	Sharp, Okla.....	\$2,000
G. W. Grayson.....	Oct. 1, 1917, to June 30, 1918.	do.....	Eufaula, Okla.....	2,000
Eula J. Branson.....	.....	Tribal secretary.....	Muskogee, Okla.....	1,500
R. C. Allen.....	July 1, 1917, to Jan. 31, 1918.	Tribal attorney.....	do.....	5,000
Jas. C. Davis.....	Feb. 1 to June 30, 1918.	do.....	do.....	5,000

The contract of Mr. R. C. Allen as tribal attorney was renewed for the fiscal year 1918, allowing him the services of one stenographer at a salary of \$100 per month and expenses, including court costs, etc., in the performance of his duties. The total amount expended by him, including stenographers, clerical help, interpreters, etc., was \$1,485.64, and for traveling expenses, office incidentals, court costs, etc., \$2,014.81. Mr. R. C. Allen resigned January 31, 1918, and Mr. James C. Davis was appointed to fill his place. The total amount expended by him, including stenographer, clerical help, interpreters, etc., was \$716.25, and for traveling expenses, office incidentals, court costs, etc., \$1,452.29.

*Tribal officers of Choctaw Nation.*

Name.	Title.	Address.	Salary per annum.
Victor M. Locke, Jr.....	Principal chief.....	Antlers, Okla.....	\$2,000
Mrs. Dollie Locke Archer.....	Tribal secretary.....	do.....	1,000
Peter J. Hudson.....	Tribal interpreter.....	Tuskahoma, Okla.....	1,200
William R. McIntosh.....	Mining trustee.....	McAlester, Okla.....	4,000

Mr. P. J. Hurley's contract as tribal attorney was not renewed for the year 1918, as he entered the military service. There was no tribal attorney appointed during the year. Mr. Victor M. Locke, Jr., principal chief, accepted an appointment in the military service and by reason thereof automatically vacated his office on January 1, 1918.

*Tribal officers of Chickasaw Nation.*

Name.	Title.	Address.	Salary per annum.
Douglas H. Johnston.....	Governor.....	Emet, Okla.....	\$3,800
Ludie Johnston.....	Tribal secretary.....	Milburn, Okla.....	1,000
Eastman Johnson.....	Interpreter.....	Tishomingo, Okla.....	300
J. Hamp Willis.....	Mining trustee.....	Kingston, Okla.....	4,000
Reford Bond.....	Tribal attorney.....	Chickasha, Okla.....	5,000

Mr. Reford Bond's contract was renewed at \$5,000 per annum and expenses incurred by him in the performance of his duties. Such expenses for the fiscal year 1918 were \$1,473.66.

The tribal officers of all nations are allowed their traveling and necessary expenses when away from home while on official business, except the mining trustees of the Choctaw and Chickasaw Nations.

The Cherokee and Seminole Nations had no tribal attorneys for the fiscal year 1918, and all legal matters affecting restricted Indians and other citizens of those nations were attended to by the United States probate attorneys.

After July 1, 1914, the salaries and expenses of probate attorneys and other expenses of protecting minor allottees and citizens of the Five Civilized Tribes under legal disability have been paid from an appropriation by Congress and not from tribal funds, as in some cases during the fiscal year 1914.

The duties of the principal chiefs and governors of the various nations composing the Five Civilized Tribes are to represent the respective nations pending the settlement of tribal affairs and to sign deeds and other tribal documents.

In accordance with section 11 of the act of Congress approved April 26, 1906, the salaries of tribal officials, including the tribal attorneys, are paid by the disbursing officer of the Superintendent for the Five Civilized Tribes upon warrants signed by the principal chief or governor, as the case may be, and approved by the Department of the Interior.

#### FIELD DIVISION.

This division is concerned with the organization and general direction of the field employees. About 60 per cent of the employees of this office are located in the field at various places away from Muskogee. The territory under supervision comprises 40 counties in Eastern Oklahoma and is divided into the following field districts:

District No.	Location of field office.	Counties.
1.....	Vinita.....	Ottawa, Craig, and part of Mayes.
2.....	Locust Grove.....	Delaware and part of Mayes.
3.....	Nowata.....	Washington, Nowata, and Rogers.
4.....	Sapulpa.....	Creek and Tulsa.
5.....	Oklmulgee.....	Oklmulgee and Okfuskee.
6.....	Muskogee.....	Wagoner, Muskogee, and McIntosh.
7.....	Tahlequah.....	Cherokee.
8.....	Sallisaw.....	Adair and Sequoyah.
9.....	Poteau.....	Le Flore and Haskell.
10.....	McAlester.....	Latimer and Pittsburg.
11.....	Holdenville.....	Hughes.
12.....	Atoka.....	Pontotoc, Coal, and Atoka.
13.....	Pauls Valley.....	McClain, Garvin, and Murray.
14.....	Chickasha.....	Grady, Stephens, and Jefferson.
15.....	Ardmore.....	Carter, Love, and Marshall.
16.....	Durant.....	Johnston and Bryan.
17.....	Hugo.....	Choctaw and Pushmataha.
18.....	Idabel.....	McCurtain.
19.....	Wewaka.....	Seminole.

Although greater difficulty has been experienced during the past year than ever before in securing and retaining experienced field employees, much satisfactory progress has been reported. The field clerks, appraisers, probate attorneys, farmers, Indian police, and other employees who constitute the personnel of the field force have, almost without exception, worked diligently, harmoniously, and with a common purpose. I feel that they deserve the highest commendation for the manner in which they have met the increasing responsibilities that have devolved upon them. Many of the men in this service have responded patriotically to the Nation's call to military service, and many others have been left with inexperienced or inadequate help with which to carry on their work. In numerous instances

it has been impossible to fill vacancies promptly at the salaries permissible under our appropriation, and this has often unavoidably entailed additional work on those who remained in the service. More than one-third of the employees who were in this service at the beginning of the fiscal year have resigned.

A gratifying tendency on the part of restricted Indians to cooperate more earnestly with field employees in every worthy endeavor has been reported from all districts. This is notably true with respect to war activities and the closely related subject of food and feed production. Their young men have entered the military service in large numbers and, I am reliably informed, are making excellent soldiers. Those in civil life have responded liberally to every call for the purchase of Liberty Bonds and War-Savings Stamps, and their contributions to the American Red Cross have in almost every community compared favorably with and in some instances exceeded those of their white neighbors. No accurate statement can be furnished as to the total amounts Indians of the Five Civilized Tribes have subscribed to the Red Cross and for Liberty Bonds and War-Savings Stamps, as their subscriptions to the Red Cross have largely been unrestricted funds, as have also a large number of the subscriptions which they have made to Liberty Loans and for War-Savings Stamps. A conservative estimate, however, is \$10,000,000.

The outstanding feature of the field work of the year has been the remarkable unanimity with which Indians have responded to the Nation's call to service. The gigantic conflict in which the world is now engaged has aroused in the Indians of eastern Oklahoma dormant energies and latent capacities of heart and mind hitherto hidden and unknown. They meet with members of their race and with their white neighbors at Red Cross and other patriotic gatherings and by word and deed evince the same true spirit of patriotism that actuates all worthy Americans. Their wives and daughters render loyal and self-sacrificing service to the Red Cross and every other worthy movement participated in by their white sisters. Recently one of our farmers called to my attention an instance of one of these worthy women, a full-blood, who regularly drives 10 miles twice each week to the nearest Red Cross meeting place in order that she may there do her bit making garments for the soldiers. This is not an isolated case, as many instances of like character could be cited.

Beginning January 8, 1918, a meeting of the field clerks and Government farmers was held in this office for the purpose of furthering the campaign for increased food and feed production inaugurated during the preceding year. This meeting proved to be of even greater interest and value than a similar one of the previous year. The director of the extension division of the State College of Agriculture at Stillwater was present and rendered valuable aid in making the meeting a success, as did also the County Agent for Muskogee County. Another interesting and valuable feature of this meeting was an address on poultry raising, delivered by Mr. C. L. Jackson, an attorney of Muskogee, who is a very successful grower of pure-bred poultry and who has for a number of years been one of the most active exponents of increased poultry production in this State.

The following statement shows disbursements of individual Indian funds made during the year under the immediate supervision of the

field clerks and the superintendent of construction, and will give a general idea of the work performed by these employees:

*Business transacted by field force, fiscal year 1918.*

Houses built (127).....	\$134,466.67
Barns built (51).....	22,912.95
Wells drilled or dug (96).....	8,093.94
Labor, clearing land, etc.....	15,061.49
Horses purchased (255).....	31,599.75
Mules purchased (217).....	32,140.03
Cattle purchased (494).....	35,766.84
Hogs purchased (509).....	12,306.40
Wire purchased.....	25,855.67
Lumber purchased.....	35,571.12
Furniture.....	28,112.52
Wagons (228).....	35,632.15
Implements.....	25,461.35
Harness.....	10,754.81
Feed.....	23,214.96
Groceries and provisions.....	26,473.47
Physicians and drugs.....	25,120.54
Cash, monthly payments and interest.....	220,725.85
Royalty payments.....	97,553.12
Rental, agricultural.....	18,758.10
War Savings Stamps.....	15,177.33
Payments.....	9,445.66
Land purchased.....	14,508.75
Miscellaneous.....	143,303.79
<b>Total.....</b>	<b>1,048,017.26</b>

The following statement shows the amount of money disbursed to individual Indians, including amount expended under supervision and disbursements made by check direct to allottees on advice of field clerks:

Land sales, equalization and restricted per capita payment accounts...	\$631,925.46
Royalties.....	1,797,516.25
Per capita payments (approximately).....	2,000,000.00
<b>Total.....</b>	<b>4,429,441.71</b>

All of the disbursements included in the total of \$4,429,441.71 above shown were made either directly under the supervision of the field clerks or upon their recommendation. It can be readily understood that the task of supervising the immense number of disbursements included in this large sum has involved a very great amount of arduous work.

In addition to supervising these disbursements and performing their numerous other duties, our field men have assisted many Indians in leasing their lands and collecting rentals. They have thereby saved for allottees the sum of \$18,683.10. It is the practice of field employees to advise all restricted Indians to confer with the field clerk before leasing their lands. Where this advice is followed, the interest of the lessor is almost invariably better protected and usually a considerably larger rental is secured.

The Ford automobiles purchased during the preceding year have continued to contribute to the efficiency of the field force. They have enabled the field men who had them at their disposal to perform several times as much work as they otherwise could have accomplished and have proven to be an excellent investment. One of these ma-

chines was destroyed by fire during the year, and some of the others, by reason of the strenuous service to which they have necessarily been subjected, have depreciated to such an extent as to require replacement. The present greatly increased cost of feed and livery hire has made it very necessary that a greater number of the field men be supplied with cars.

#### INDUSTRIAL WORK—GOVERNMENT FARMERS.

The acreage planted by restricted Indians, to food and feed crops has shown a marked increase over that of any preceding year. Especially is this true with respect to wheat. In almost every community, Indians have devoted largely increased areas to this important crop, and in one county (Adair), where there is a large full-blood population, it is estimated that the wheat acreage is from five to eight times that of any former year. The yield of both wheat and oats has been very gratifying. Much of the land cultivated this year is new land that is being tilled for the first time, the crops from which accordingly represent a net gain in food and feed production.

The demonstration plot method of teaching better farming described in my report of last year has been continued and has again proven very effective. One of the best of these plots is on the allotment of an Indian belonging to the so-called "Night Hawk" class referred to in my last report.

In order to more effectually promote the growing of food and feed crops, it was found necessary during the past year to extend to restricted Indians considerable assistance in the matter of the purchase of seeds. The amount expended for seed wheat, a crop that had hitherto been but little grown, constituted the largest item thus disbursed from the reimbursable funds, although various other seeds were purchased in considerable quantities. The assistance thus rendered restricted Indians has resulted in a very material increase in the acreage they have planted and has undoubtedly greatly encouraged many to try to become more useful and productive citizens. It seems probable that comparatively few of the Indians who have thus received aid will require further assistance in this respect, but as there is a very marked tendency among our Indians to extend their farming operations, it seems reasonable to expect that there will for some time be many applications for seeds that should receive favorable consideration.

Stock raising is becoming an important industry with restricted Indians in many sections. A number of allottees have recently, under the supervision of the field clerks and farmers, invested considerable sums in pure-bred cattle and hogs, and many reports have been received showing that Indians have either through purchase or breeding increased their live-stock holdings. There has been but little disease among stock reported, and the outlook for a continued advance in this direction is highly encouraging.

The poultry industry, heretofore confined chiefly to the urban population of eastern Oklahoma, is now beginning to receive from Indian farmers a share of the attention it deserves, and it is hoped that the near future will show a great improvement along this line.

Home gardening, canning, and drying have, under the supervision of our field men cooperating with Federal, State, and county agents

and with clubs and various other organizations, assumed an importance hitherto unknown. In many communities it is very exceptional to find an Indian family without a good garden. At county and district fairs held during the fall of 1917 restricted Indians of the Five Civilized Tribes won 72 first, 29 second, 1 third, and 1 fourth prizes. They also won 3 second prizes at the Oklahoma City Fair, and 17 first, 13 second, 2 third, and 2 fourth prizes at the Muskogee Free State Fair. At the Indian fair held at Wetumka in Hughes County 110 prizes and a number of ribbons were awarded to Indians, and at the Indian fairs at Atoka, Ada, and Locust Grove, Indians were awarded 12, 28, and 13 prizes, respectively. The Five Tribes exhibit again won first prize at the Oklahoma City Fair in competition with all other Indian agencies in the State and the silver cup was awarded this superintendency for the fourth consecutive year. I have just recently been advised that the National War Garden Commission has awarded to Mrs. Simon Billy, a restricted Choctaw Indian of Hugo, Okla., their national capital prize for the best home-garden canned vegetables exhibited at the Muskogee Free State Fair during the year 1917.

#### SPECIAL INSPECTION.

During the past year many cases of both criminal and civil character involving various matters pertaining to the restricted Indians have been investigated. The most important of these cases are as follows:

Forged indorsements of Government checks.....	7
Fraudulent practice before the department.....	2
Charges of fraud in removal of restrictions.....	2
Violation of departmental lease regulations.....	3
False statements of facts in proof of heirship.....	5
Enrollment frauds.....	2
Duplicate enrollment.....	1
False personation of Indians.....	3
Forged deed to Indian allotment.....	1
Charge of arson.....	1
Embezzlement by guardians.....	3
Extortion practiced upon Indians.....	3
Matters pertaining to war work.....	6
Charges against former employees.....	4
Confidential investigations requested by Commissioner of Indian Affairs.....	3

In the violation of the criminal laws in the above cases, one forger has been tried and convicted; three other offenders, one charged with forgery and two with embezzlement, are now awaiting trial, indictments having been secured in the State and Federal courts, and one other, found guilty of fraudulent practice, has been disbarred by the department. In several other cases the courts failed to return indictments on account of insufficient evidence. Considerable money has been recovered and returned to the Indians as a result of investigations of forged checks, embezzlement of funds by guardians, and fraud perpetrated by unscrupulous persons.

#### RESTRICTIONS DIVISION.

There have been allotted to members of the Five Civilized Tribes a total of 15,794,208 acres. These allotments were made subject to a restriction against alienation. By various acts of Congress and



by the Secretary of the Interior, under authority of law, the restriction against alienation has been removed from approximately 12,825,196 acres. The remaining restricted acreage is approximately 2,888,162 acres, about 18.3 per cent of the entire allotted area.

Under the act of Congress approved May 27, 1908 (35 Stats., p. 312), the Secretary of the Interior is authorized to remove the restriction, wholly or in part. Applications or suggestions for such removals are first made to or by the field clerks. The field clerks satisfy themselves as to the necessity and advisability of removals, and upon investigation base their recommendations to this office for conditional or unconditional removals, depending upon the ability of the individual Indian to handle the land (or the proceeds of a sale) without the assistance of the Government.

When a conditional removal is recommended and is approved by the Secretary of the Interior, the land is offered for sale at public auction to the highest bidder after having been extensively advertised for 30 days by newspapers and circulars. Where the needs of the allottee are such that the entire proceeds will not be immediately required, the land is offered for sale on the deferred payment plan. The title to the land sold passes to the purchaser by deed from the allottee, the deferred payments being evidenced by the purchaser's notes drawing 6 per cent interest, secured by first mortgage on the land conveyed.

In none of the cases where deferred payment sales have been made has it been necessary to sell the lands secured by mortgage to enforce the payment of the balance of the consideration.

In many instances an Indian's allotment is located a great distance from where he resides and where he expects to continue his residence. In few cases can the allottee handle the renting of an allotment so located with profit to himself. It is therefore considered advisable to dispose of the allotment, or a part thereof, and with the proceeds purchase a suitable tract for a home in the locality where he wishes to live. Such purchases are made under the direction of the department, and the conveyance is evidenced by a special form of warranty deed, prescribed by the department, which provides for the continuation of the restriction against alienation until April 26, 1931.

In a case where lands were purchased for a home for an allottee under this plan and conveyance made by deed continuing restrictions the allottee attempted to mortgage the premises to secure a loan, and, upon default of payments provided thereunder, the mortgagee instituted foreclosure proceedings. At the instance of the Department of the Interior the Government sought an injunction in the United States Court for the Eastern District of Oklahoma to prevent a sale of the premises under foreclosure proceedings. The application for an injunction was denied, and an appeal was taken to the United States Circuit Court of Appeals, Eighth Circuit, where a decision was recently handed down (*United States v. Law*) affirming the Government's contention that lands so purchased can not be alienated without the approval of the Secretary of the Interior.

During the fiscal year two competency commissions have spent a part of their time in examining allottees of the Five Civilized Tribes to ascertain those who, by their manner of living and ability, demonstrate that they are capable of handling all transactions affecting their allotments without the assistance of the department. In all

cases where such ability was found, recommendations were made for the removal of restrictions, without condition, from the allottee's remaining restricted lands. The number of removals approved on the recommendation of the competency commissions as compared with removals handled in the usual manner are as follows:

Conditional, land sold.....	714
Unconditional, on recommendation of this office.....	182
Unconditional, on recommendation of the competency commissions.....	656
Total of removals.....	1,532

The canvass made by the competency commissions has covered the Cherokee, Choctaw, and Chickasaw Nations. A portion of the area of the Choctaw and Chickasaw Nations, where the Indian population is heaviest, has been canvassed the second time. The applications received by the competency commission on which recommendations are to be made are filed at this office, docketed, checked with the enrollment and allotment records, checked to ascertain if lands affected are involved in suits to clear title, and checked against the records of outstanding reimbursable agreements. Certificates for the removal of restrictions are then prepared to accompany the reports of the competency commission. Record of the orders of the Secretary of the Interior removing the restrictions and the delivery of the approved orders to the respective applicants are made by this office.

The act of Congress approved May 27, 1908 (35 Stat., p. 312), authorizes restricted Indians to lease their surplus allotments for agricultural and grazing purposes for five years, and their homestead allotments one year, without departmental approval. Such leases are commonly known as commercial leases as distinguished from departmental leases. Such leases, to be valid for periods longer than five and one year, respectively, must be approved by the department. Many restricted Indians under this law lease their lands for grossly inadequate considerations and the department frequently finds itself unable to render assistance and estopped from protecting the interest of the Indian. Instead of encouraging and leading the Indian to live on his allotment, this law results in his being overreached in many instances and in perpetuating an undesirable lease system in eastern Oklahoma, detrimental alike to the Indian and to the community in which he resides.

It is the general rule that surplus allotments adapted to tillage are covered by agricultural leases with unexpired terms varying from one to five years. These leases lower the sale value. Purchasers can not afford to pay the full value for tracts where valid leases preclude possession for a term of years. Frequently the entire rental for the term of the lease is paid in full.

During the year 1,327 new applications were received and filed, and 176 applications that had been previously denied or dismissed were reinstated, making a total of 1,503 cases available for consideration. There were advertised for sale under conditional removals 1,126 tracts of land, and bids were accepted on 761 tracts (67.6 per cent of the number offered) covering 58,843 acres. The amount of accepted bids was \$805,132.07, and exceeded the appraisement by \$181,929.14.

Since May 27, 1908, there have been filed 16,154 applications for removal of restrictions and the following tables show the action

thereon, the acreage from which the restrictions on alienation have been conditionally and unconditionally removed, also removals for school site purposes under the act of Congress approved May 29, 1908.

*Status of cases for period ending June 30, 1918.*

Nation.	Pend- ing.	Approved.			Can- celed.	De- nied.	Dis- missed.	Total.
		Condi- tional.	Uncondi- tional.	School site.				
Choctaw.....	24	2,690	1,440	75	214	435	827	5,705
Chickasaw.....	2	531	657	19	29	180	224	1,612
Cherokee.....	52	2,304	1,792	41	128	820	703	5,840
Creek.....	45	924	312	46	50	333	465	2,175
Mississippi Choctaw.....	43	418	49	6	30	21	78	645
Seminole.....	15	81	20	3	5	15	33	177
Total.....	181	6,948	4,270	190	456	1,774	2,335	16,154

*Acreage from which restriction has been removed by the Secretary of the Interior.*

[Acts of May 27 and 29, 1908.]

Nation	Conditional (land sold).	Uncondi- tional.	School site	Total.
Choctaw.....	231,627.07	174,012.16	109.57	405,748.80
Chickasaw.....	35,257.14	79,381.13	38.50	114,676.77
Cherokee.....	92,080.91	88,508.18	42.85	175,601.94
Creek.....	45,797.98	16,291.42	50.00	62,139.40
Mississippi Choctaw.....	35,854.94	3,223.04	4.00	39,081.28
Seminole.....	3,590.18	668.59	15.17	4,273.94
Total.....	444,177.52	357,084.52	260.09	801,522.13

*Conditional removals of restrictions—Sales made under departmental supervision to June 30, 1918.*

Nation.	To June 30, 1917.			For fiscal year ending June 30, 1918.		
	Area (acres).	Average price per acre.	Amount received.	Area (acres).	Average price per acre.	Amount received
Choctaw.....	238,532.65	\$8.08	\$1,927,893.07	28,741.42	\$11.63	\$331,618.04
Chickasaw.....	33,541.34	11.93	400,350.22	1,701.26	20.56	34,977.57
Cherokee.....	78,019.96	10.74	838,181.47	14,049.39	10.72	150,728.57
Creek.....	115,304.97	17.22	1,985,762.14	3,610.40	33.74	120,044.34
Seminole.....	2,984.35	12.94	38,630.56	643.25	21.66	13,933.23
Total.....	468,386.27	11.08	5,190,817.46	48,745.74	18.54	680,301.64

*Allotted land from which restrictions have been removed to June 30, 1918.*

Nation.	Act of July 1, 1902.	Act of Apr. 21, 1904.	By opera- tion of law, Aug. 8, 1907.	Act of May 27, 1908.	Act of May 29, 1908.	Town site re- movals, act Mar. 3, 1908.	Total.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Choctaw.....	229,600	317,400	.....	3,330,710	114	3,615	3,931,339
Chickasaw.....	207,700	299,000	.....	2,698,773	38	1,187	3,201,688
Cherokee.....	.....	313,500	.....	3,141,642	43	3,086	3,458,231
Creek.....	73,110	549,480	364,680	1,041,495	50	6,849	2,035,064
Seminole.....	.....	44,000	.....	154,259	15	.....	198,274
Total.....	510,410	1,523,380	364,680	10,411,879	260	14,587	12,835,196

*Removal of restrictions by the Secretary of the Interior, Five Civilized Tribes.*

Fiscal year.	Act of May 27, 1908.		Act of May 29, 1908.		Total.
	Number of tracts.	Acreage.	Number of tracts.	Acreage.	
1909.....	1,865	52,781.09	9	12.50	52,778.59
1910.....	1,470	88,070.34	41	56.54	88,126.88
1911.....	953	34,679.34	18	26.00	34,705.34
1912.....	652	45,075.51	27	24.42	45,099.93
1913.....	956	60,532.64	27	54.61	60,587.25
1914.....	1,106	81,034.73	15	26.50	81,061.23
1915.....	786	50,077.33	16	25.67	50,103.00
1916.....	697	42,108.60	5	6.68	42,110.23
1917.....	1,438	155,408.17	14	25.22	155,428.39
1918.....	1,532	141,524.30	1	2.00	141,526.30
Total.....	12,455	751,262.04	173	260.00	751,522.13

*Comparative statement of sales consummated under conditional removals.*

Fiscal year ended June 30—	Tracts sold.	Acres sold.	Consideration received.
1909.....	150	10,924.21	\$149,422.20
1910.....	629	53,182.75	565,665.87
1911.....	871	67,780.47	674,720.71
1912.....	504	39,277.39	316,023.66
1913.....	735	51,817.89	502,403.36
1914.....	934	66,104.33	636,042.80
1915.....	634	41,531.52	480,320.96
1916.....	550	33,017.65	360,422.21
1917.....	530	22,775.62	407,569.96
1918.....	714	48,745.74	660,301.64
Total.....	6,251	444,177.57	4,702,917.07

*Status of cases of conditional removals, June 30, 1918.*

Authorized:	
Cases where land partly or all sold.....	6,251
Pending sales.....	226
Cases where land is unsold.....	286
Cases where land withdrawn from sale on account of clouded titles, request of allottees, or long-time leases.....	185
Total.....	6,948

*Status of inherited land cases for fiscal year ending June 30, 1918.*

Number of cases filed:	
Approved.....	674
Disapproved.....	9
Dismissed.....	346
Pending in this office or returned to field clerk.....	278
Pending in department.....	10
Total.....	1,317

Nation.	Pending in—		Approved.	Disapproved.	Dismissed.	Total.
	Agency.	Department.				
Choctaw.....	46	3	141	2	121	313
Chickasaw.....	12	.....	37	.....	16	65
Cherokee.....	29	2	83	.....	59	173
Creek.....	174	4	388	6	133	705
Mississippi Choctaw.....	12	.....	19	1	13	45
Seminole.....	5	1	6	.....	4	1,317
Total.....	278	10	674	9	346	1,317

During the year, little progress was made in disposing of pending petitions for the approval of inherited land deeds for the reason that petitioners failed to complete petitions. Nothing was done looking to the disposition of what are known as Benjamin Harrison cases, due to the fact that the question whether lands selected subsequent to the death of the citizen entitled passed to the heirs as an inherited or as an original allotment had not been definitely determined by the court of last resort.

### LEASE DIVISION.

The following tables show the disposition of all leases heretofore filed with this office:

#### LEASES FILED.

Oil and gas.....	37, 169
Coal and asphalt.....	501
Miscellaneous.....	304
Agricultural.....	2, 962
<b>Total.....</b>	<b>40, 936</b>

#### DISPOSITION OF LEASES FILED.

<b>Approved and in effect:</b>	
Oil and gas.....	6, 327
Coal and asphalt.....	93
Miscellaneous.....	93
Agricultural.....	1, 495
<b>Total.....</b>	<b>8, 008</b>

<b>Surrendered or canceled by department:</b>	
Oil and gas.....	15, 939
Coal and asphalt.....	156
Miscellaneous.....	37
Agricultural.....	152
<b>Total.....</b>	<b>16, 284</b>

<b>Canceled by agreement:</b>	
Oil and gas.....	226
Coal and asphalt.....	4
<b>Total.....</b>	<b>230</b>

<b>Expired:</b>	
Oil and gas.....	689
Coal and asphalt.....	15
Miscellaneous.....	2
Agricultural.....	314
<b>Total.....</b>	<b>1, 020</b>

<b>Removed from departmental supervision after approval:</b>	
Oil and gas.....	5, 054
Coal and asphalt.....	84
Miscellaneous.....	13
Agricultural.....	166
<b>Total.....</b>	<b>5, 317</b>

## Withdrawn or disapproved by department:

Oil and gas.....	7,979
Coal and asphalt.....	87
Miscellaneous.....	108
Agricultural.....	723
<b>Total.....</b>	<b>8,907</b>

## Canceled for failure to refile:

Oil and gas.....	537
Coal and asphalt.....	39
Miscellaneous.....	12
Agricultural.....	23
<b>Total.....</b>	<b>611</b>

## Returned to lessee, no jurisdiction:

Oil and gas.....	143
Coal and asphalt.....	5
Miscellaneous.....	7
Agricultural.....	88
<b>Total.....</b>	<b>193</b>

## Pending at department:

Oil and gas.....	81
Coal and asphalt.....	6
Miscellaneous.....	13
<b>Total.....</b>	<b>100</b>

## Pending in this office:

Oil and gas.....	174
Coal and asphalt.....	2
Miscellaneous.....	19
Agricultural.....	71
<b>Total.....</b>	<b>266</b>

**Total leases filed..... 40,936**

Pending in this office June 30, 1917..... 309  
 Filed during year ended June 30, 1918..... 1,450

**Total..... 1,759**

Leases forwarded for approval or disapproval..... 1,480  
 Leases returned, no jurisdiction..... 13  
 Leases pending in this office, June 30, 1918..... 266

**Total..... 1,759**

## ASSIGNMENTS.

Assignments pending June 30, 1917..... 340  
 Assignments filed during year ended June 30, 1918..... 1,078

**Total..... 1,418**

Assignments forwarded department..... 1,161  
 Agricultural assignments acted upon by superintendent..... 16  
 Assignments dismissed or returned, no jurisdiction..... 80

**Total..... 1,257**  
 Assignments pending June 30, 1918..... 161

**Total..... 1,418**

The number of oil and gas leases filed during the past year has been less than during the two or three preceding years, due largely to extensive oil fields having been discovered in Kansas and Texas. During the past few months uncertain conditions, particularly the scarcity of labor and material, have affected leasing to some extent. Since July 1, 1917, there have been filed with the office of the Superintendent for the Five Civilized Tribes, 1,450 leases and 1,078 assignments of leases.

On February 21, 1918, the department issued an order requiring the drilling of a well on each and every tract of land leased for oil and gas mining purposes, within nine months from date of approval of the lease, unless it is demonstrated that casing or other well equipment can not be obtained. This order brought forth a great many protests from lessees. The usual procedure in leasing unproven, or what is known as "wildcat" territory, is to secure a number of leases, and to drill from one to three test wells, and in the event oil is found in paying quantities by the test, other wells are then drilled, but the lessees contend that it will not be possible to drill a well within nine months on each tract of a block of leases.

Within the past year 124 new corporations have acquired or made application for the approval of leases or assignments. This is an unusually large number of new companies, and as many of them were unfamiliar with departmental regulations, a great deal of time was taken to explain to them the requirements necessary for the completion of their general papers.

In order that it may be determined at any time whether a person is interested in oil and gas leases in excess of the acreage permitted by the regulations, each stockholder in a corporation is required to furnish a personal affidavit showing the stock held by him in corporations holding leases on lands in the Five Civilized Tribes for oil and gas mining purposes. There have been 16,526 such affidavits filed within the year, each of which has been numbered and made a matter of record, requiring a large amount of clerical work.

Only 16 leases for mining coal and asphalt on allotted lands were filed for consideration during the year. It is generally understood that many tracts of allotted land are underlaid with coal, but these are not being developed to any great extent. It is believed, however, that increased activity in leasing lands for coal mining purposes may be expected in the near future.

A total of 76 miscellaneous leases were filed for lead, zinc, and other minerals, and surface sites for tanks, pump stations, refineries, water rights, etc. On December 6, 1917, the department modified the form for leases for minerals other than oil and gas and coal and asphalt, to provide, in lieu of advanced annual royalty, a rental of 50 cents per acre for the first year, 75 cents for the second year, and \$1 for the third and each succeeding year, retaining the provision for development within one year of approval, the lease to be made for 10 years and as much longer as minerals are found in paying quantities. These changes are greatly to the advantage of the lessor, and as the requirements are clearer, the new form is more satisfactory to both the department and the public.

Four hundred and thirty-one agricultural and grazing leases were filed as against 243 in the preceding year. The large increase in the

number filed is due to the fact that the field clerks have been instrumental in securing more adequate rentals for allottees than they have been receiving for commercial leases. For this reason, also, less difficulty has been experienced in the collection of rentals, and in securing completion of improvements under the terms of the leases.

While the number of assignments filed was less than during the preceding year, the work in disposing of same was not materially decreased, for the reason that many of the assignments were in favor of the larger companies, having extensive acreage and stock ownership.

#### PIPE LINES.

Easements for pipe lines, telephone and telegraph lines, pump stations, and tank sites, for fiscal year ended June 30, 1918:

Applications filed to and including June 30, 1917.....	304
Applications filed during year ended June 30, 1918.....	44
<b>Total.....</b>	<b>348</b>
Applications approved or withdrawn to and including June 30, 1917.....	243
Applications approved during year ended June 30, 1918.....	40
Applications withdrawn during year ended June 30, 1918.....	11
Applications pending at department.....	3
Applications in this office awaiting additional information from applicants.....	15
Applications in this office awaiting opinion of allottees in re assessments of damages.....	10
Applications pending awaiting inspection of lines and assessments of damages....	26
<b>Applications filed during year:</b>	
For pipe line rights of way.....	34
For telephone and telegraph rights of way.....	8
For pump station sites.....	2
<b>Total.....</b>	<b>44</b>

The four most important applications filed during the year were for pipe line rights of way connecting the Healdton oil field with the State of Texas; two of which run from the State of Texas through the Healdton oil field to the Cushing oil field. These lines will be of great value to the Healdton field, where the pipe line facilities have heretofore been inadequate. The majority of the remaining applications were for lines of no great length but lines connecting producing fields with trunk lines, refineries, or markets for natural gas, and are of material value in increasing the marketing facilities for both oil and natural gas.

#### SEGREGATED COAL LEASES.

The act of June 28, 1898 (30 Stat., 495), authorized the leasing of the segregated coal and asphalt lands in the Choctaw and Chickasaw Nations, and under said act there were in force on June 30, 1914, 109 coal leases covering 99,800 acres of segregated coal lands. The act of March 4, 1913 (37 Stat. L., 1007), authorized the Secretary of the Interior in cases where additional acreage is required by lessees for the successful operation of mines to lease to such lessees additional adjoining acreage not exceeding 640 acres. Applications filed for additional acreage under this act are investigated as to the necessity for the acreage and the ability of the applicant to operate the property.



If the investigation is favorable and the Secretary approves, the Mining Trustees and the applicant are authorized to execute a lease covering the land, subject to the approval of the Secretary of the Interior.

*Applications filed for additional acreage under act of Mar. 4, 1913.*

Applications filed to and including June 30, 1917.....	40
Applications filed during year ended June 30, 1918.....	10
<b>Total.....</b>	<b>50</b>
Applications approved by the Secretary of the Interior.....	29
Applications withdrawn.....	5
Applications denied.....	3
Applications pending June 30, 1918.....	13
<b>Total.....</b>	<b>50</b>

In the 29 cases where applications have been approved, 14 new leases and 9 contracts adding additional acreage to existing leases have been approved by the Secretary of the Interior. The total additional acreage leased in these 23 cases amounts to 10,338.08 acres. In the remaining 6 cases, the Mining Trustees and the applicants have been instructed to submit contracts, two of which have been filed and are pending at the department.

Of the 13 pending applications, 9 are awaiting investigation and report of the Mining Trustees and the Bureau of Mines, and 4 are awaiting additional information from the applicants, all of whom have been advised that in view of the proposed sale of the segregated coal and asphalt deposits under the act of February 8, 1918, it is believed additional acreage should be granted only in those cases where the additional acreage is necessary to continue the operations of the mines.

*Segregated asphalt leases.*

Leases acquired under act of June 28, 1908, in force on June 30, 1917.....	6
Leases canceled by department during year ended June 30, 1918.....	1
Leases in force on June 30, 1918.....	5

Assignment approved during year: Lessee, James S. Downard; assignee, Whitaker Brodnax.

*Rental agricultural and grazing tribal lands.*

Segregated tracts rented in Choctaw-Chickasaw Nations.....	861
Tracts unallotted lands in Choctaw-Chickasaw Nations.....	4
Tracts tribal land:	
Creek Nation.....	21
Seminole Nation.....	2
<b>Total tracts tribal land rented.....</b>	<b>888</b>

These tracts vary in size from small town lots to average size farms, and are rented subject to the disposition of the land at the next advertised sale. The rental received varies according to the value of the land for grazing, meadow, or agricultural purposes. A statement of the amounts received from this source appears under the head of "Royalty."

## ROYALTY DIVISION.

The royalty division opens accounts with individual lessors for all classes of departmental leases, and keeps a record of receipts and disbursements thereon, as well as on tribal leases.

Oil and gas leases are classed as nonproducing and producing, on which royalty is paid. Payments on nonproducing leases depend upon acreage and age of lease. Payments on producing leases depend upon production and sale.

Remittances are made direct to this office by lessees while a lease is nonproductive. After production is secured, the purchaser of oil secures a division order, under authority of which he is required to submit a sworn report, showing gross production, sale price, and period during which oil is run. Lessees submit sworn reports in such cases every three months, which are checked against the purchasers' reports for errors and discrepancies.

*Open accounts and classifications.*

Open accounts, June 30, 1917.....	10,974
Producing accounts, June 30, 1918.....	1,414
Nonproducing accounts.....	6,945
Agricultural accounts.....	1,285
Leases canceled (bond held).....	130
Tribal coal lease accounts.....	129
Tentative leases.....	62
Pipe line accounts.....	618
Old blanket lease accounts.....	35
	<hr/> 10,618
Decrease.....	356

The increased demand for oil has resulted in higher prices for every grade of oil in the various Oklahoma fields. Range of prices is shown below. As noted in the last annual report oil purchasers in some cases objected to meeting the highest prices paid in a particular field, claiming that the purchasers posting and paying the higher prices were unable to take all oil offered, and, therefore, other parties should not be required to pay the higher price quoted, but should be allowed to settle at the price for which oil was actually sold. Full information in this case was forwarded to the department, and on May 16, 1918, the Secretary held that the basis of the highest price posted at any particular time by a responsible purchaser should be considered the market price at that time in that particular field. Nearly all the lessees whose leases were affected have paid the balance due in accordance with the ruling of the Secretary.

*Individual lease accounts, by nations.*

Nation.	Non-producing.	Producing.	Agricultural, hay-cutting, miscellaneous.	Coal and asphalt,	Leases canceled, bond held.	Total.
Cherokee.....	1,017	779	465	33	27	2,321
Creek.....	4,069	579	320	56	70	5,094
Choctaw-Chickasaw.....	1,447	56	455	31	24	2,013
Seminole.....	412	.....	45	.....	9	466
Total.....	6,945	1,414	1,285	120	130	9,894

*Individual lease accounts, by nations—Continued.*

Nation.	Nonproduc- ing acreage.	Producing acreage.	Agricul- tural, hay- cutting, miscel- laneous acreage.	Coal and asphalt acreage.	Total.
Cherokee.....	63,314	51,044.01	27,777	3,225	145,360.01
Creek.....	497,303	60,378.82	17,168	4,629	579,478.82
Choctaw-Chickasaw.....	106,514	5,982.33	58,321	4,320	175,287.33
Seminole.....	38,846	.....	2,586	.....	41,432.00
Total.....	706,977	117,355.16	103,052	12,174	941,558.16

Nation.	Leases.	Acres.	OIL.	
			Barrels.	Value.
Cherokee.....	779	51,044.01	2,077,647.97	\$622,874.68
Creek.....	579	60,378.82	8,492,760.94	2,225,025.41
Choctaw-Chickasaw.....	56	5,982.33	2,570,064.77	394,291.25
Total.....	1,414	117,355.16	12,140,463.68	3,142,191.29

Nation.	Gas.	Coal.		Glass sand.	
		Tons.	Value.	Tons.	Value.
Cherokee.....	\$39,154.06	319.51	\$63.90	.....	.....
Creek.....	113,450.11	241,921.41	29,772.24	.....	.....
Choctaw-Chickasaw.....	10,804.47	26,056.82	2,080.60	1,747.98	\$302.59
Total.....	163,408.64	268,297.74	31,917.04	1,747.98	302.59

*Changes of prices in Mid-Continent and Healdton fields.*

## MID-CONTINENT FIELD.

Name of purchaser and date of posted price:

Sinclair Oil & Gas Co., Aug. 2, 1917.....	\$1.85
Prairie Oil & Gas Co., Aug. 15, 1917.....	1.90
Prairie Oil & Gas Co., Aug. 18, 1917.....	2.00
Sinclair Oil & Gas Co., Mar. 18, 1918.....	2.25
Prairie Oil & Gas Co., Mar. 19, 1918.....	2.25

## HEALDTON FIELD.

Name of purchaser and date of posted price:

Magnolia Petroleum Co.—	
Aug. 1, 1917.....	\$1.00
Aug. 7, 1917.....	1.10
Aug. 15, 1917.....	1.15
Aug. 20, 1917.....	1.20
Mar. 16, 1918.....	1.45

## CUSHING FIELD.

Name of purchaser and date of posted price:

The Texas Co.—	
Aug. 15, 1917.....	\$2.15
Aug. 18, 1917.....	2.25
Mar. 19, 1918.....	2.50

## LEASES, CANCELLATIONS, AND CLAIMS.

Leases canceled, in whole or in part.....	\$1,490
Leases canceled, delinquent.....	130
Percentage of delinquency.....	8.7
Leases canceled and delinquent preceding year.....	35
Percentage of delinquency preceding year.....	6.7

## PENDING CLAIMS, OLD AND NEW.

Canceled leases:	
No bond.....	\$1,087.00
Personal surety.....	7,526.00
Surety bonds.....	15,140.06
Total claims.....	23,753.06

Of this amount there is pending from last year:

Federal Union Surety Co. (judgment has been obtained).....	\$4,799.00
Equitable Surety Co. (now liquidating).....	3,391.00
Illinois Surety Co. (receivership).....	1,383.00
Personal surety (95 per cent agricultural leases).....	5,702.00
No bond (all agricultural leases).....	938.00
Total old claims.....	16,213.00
New claims, personal and surety bonds, including new claims against Equitable Surety Co., and no bonds.....	7,193.00
Total claims.....	23,406.00

In canceling leases, the requirement that all necessary papers and payments be in the superintendent's office on or before the due date has been modified by a decision of the United States district court, which held that when papers and payments are deposited in the post office in time to reach the office of the superintendent on or before the due date, such deposit constitutes compliance with the abovementioned rule.

In cases where lessees have been called for military service and are unable to complete application for cancellation, as prescribed by the rules, the usual regulations have been waived and leases canceled without further liability.

The form of agricultural leases has been changed, making rental payable to the Superintendent for the Five Civilized Tribes instead of to the lessor. It is believed this change will facilitate collection of rental by this office.

On August 10, 1917, the Secretary approved special regulations, covering the production and sale of casing-head gas, authorizing the Superintendent for the Five Civilized Tribes to approve such contracts made in accordance with the regulations. The Secretary has since authorized departure from the regulations when lessees of restricted leases manufacture gasoline from the gas produced on their leases; payment to be made on the basis of plant production and the selling price of the gasoline.

## INCOME TAX.

Only a part of the United States Treasury reports, showing income tax to be paid by individual Indians has been received. It is, therefore, not possible to complete this report. One restricted Indian paid \$114,882 income tax for the year 1917.

*Receipts and disbursements oil, gas, and other individual royalties from 1904 to 1918.*

Fiscal year.	Receipts.	Disbursements.	Fiscal year.	Receipts.	Disbursements.
1904.....	\$1,300.00		1913.....	\$1,496,179.31	\$1,201,362.09
1905.....	91,634.40	\$61,931.38	1914.....	2,059,826.14	1,520,196.22
1906.....	323,555.40	339,279.01	1915.....	1,953,055.27	1,195,222.72
1907.....	775,489.15	679,247.45	1916.....	3,960,426.68	1,266,216.91
1908.....	1,662,627.55	1,685,675.26	1917.....	4,431,645.53	2,877,130.58
1909.....	1,813,460.28	1,802,895.20	1918.....	4,076,628.15	7,637,771.20
1910.....	1,420,864.97	1,301,508.69			
1911.....	1,365,826.52	1,191,997.18	Total.....	27,232,961.79	23,384,428.37
1912.....	1,134,432.34	1,123,864.08			

Coal leases acquired under act of June 28, 1898.....	108
Acreage embraced.....	103,302.66
Coal leases acquired under act of Mar. 4, 1913.....	15
Acreage embraced.....	6,355.42
Number of asphalt leases.....	5
Tons of coal mined during fiscal year.....	3,227,595
Tons of coal mined during preceding year.....	2,874,809
Advance royalty and royalty on production during fiscal year.....	\$276,186.83
Advance royalty and royalty on production during preceding year.....	\$238,238.49
Advance royalty paid on asphalt leases.....	\$2,500.00

*Segregated and unallotted land rentals.*

Number of leases.....	888
Rentals paid.....	\$17,632.12
Miscellaneous tribal funds.....	\$4,850.86

### CASHIER'S DIVISION.

While total receipts and disbursements were less than for the fiscal year 1917, on account of smaller per capita payments, although the same number of persons were paid, still the volume of business handled by this division was greater than during any previous year.

A very important and beneficial change in the manner of accounting for individual Indian money was effected during the year. Formerly a checking balance in the United States Treasury for royalty money only was kept, but nine-tenths of this royalty money was placed in banks to the credit of individual Indians and each account kept separate. Other individual Indian money derived from land sales and transferred from per capita and equalization payments was also kept in banks on individual accounts besides keeping the moneys separate as to their source. The constantly increasing number of these accounts had caused the making of the quarterly pay rolls such a task that practically one-half the time the daily work in connection with receiving and disbursing individual money was handicapped. This condition naturally caused a great many delays that became more and more exasperating with the rapidly growing number of accounts.

Upon request, two expert accountants of the Bureau of Efficiency spent several months analyzing the old system and substituting labor and time saving methods and devices. Under the new system the individual accounts are divided into three sections—the lease royalties on accrued rentals, lease royalties on productions and all other individual Indian money. The individual accounts in the banks have been abolished and the rendering by the banks and checking by this office of these individual Indian accounts is thereby done away with.

Only one lump sum in the name of the cashier is kept with each bank carrying individual Indian money. All checks are drawn on the Treasurer of the United States with whom an adequate checking balance is maintained. The banks are paying 3 and 4 per cent interest on the amounts deposited, and are drawn on only to replenish the Treasury balance.

The handling of the individual accounts (approximately 14,000) has been facilitated by the installation of up-to-date check writing and bookkeeping machines. The check writing machine writes the checks, makes the check register, and distributes the amounts among the various classes of disbursements. The posting of the accounts on the bookkeeping machine prepares at the same time the copies of statements that are submitted to the department, thereby avoiding the making up of many voluminous pay rolls at the end of the quarter. All the entries of one day are assembled the next morning and the balance established on all funds. The value of the new system was demonstrated at the close of the fourth quarter, when in two weeks the accounts were ready for transmission, while in previous years it required from 30 to 60 days. Our appreciation of this change will always be an expression of sincere gratitude to the Bureau of Efficiency.

The individual Indian moneys were deposited in 180 national banks of several States as follows:

State.	Number of banks.	Amount deposited.
Oklahoma.....	116	\$3,617,522.71
Iowa.....	26	1,430,860.00
Texas.....	13	793,330.00
Nebraska.....	10	253,650.00
Arkansas.....	9	297,500.00
Kansas.....	6	164,300.00
Total.....	180	\$6,556,962.71

The banks are paying 3 to 4½ per cent on these deposits. The interest has heretofore been credited to the accounts of the Indians, whose moneys were deposited in banks, leaving those whose funds were kept in the Treasury without any interest. From April 1, 1918, all Indians' accounts are participating equally in the distribution of the interest, which resulted in crediting same at the rate of 3.38 per cent on June 30.

The total funds are deposited in State and national banks of Oklahoma and show a distribution by tribes as follows:

Choctaw.....	\$2,071,339.76
Chickasaw.....	691,040.52
Creek.....	929,725.10
Cherokee.....	25,900.00
Seminole.....	24,994.77
Total.....	\$3,743,050.15

The following is a complete statement in detail showing receipts and disbursements for the fiscal year ending June 30, 1918:

*Receipts*

**Tribal collections:**

**Choctaw-Chickasaw Nations—**

	Choctaw.	Chickasaw.
Coal royalties.....	\$230, 175. 33	\$76, 725. 12
Asphalt royalties.....	1, 500. 00	500. 00
Rental on tribal lands.....	13, 886. 36	5, 002. 80
Sale of unallotted lands.....	1, 560, 918. 82	540, 305. 88
Sale of timber lands.....	534, 821. 79	194, 940. 60
Sale of surface of segregated coal and asphalt lands.....	499, 952. 12	166, 650. 72
Sale of improvements on tribal lands.....	5, 549. 68	1, 849. 90
Sale of town lots.....	439. 03	146. 33
Sale of townsite maps.....		7. 25
Timber unlawfully cut.....	33. 19	11. 06
Judgment against telephone company.....	26. 36	8. 79
Sale of Lebanon Academy land, part payment.....	210. 94	70. 31
Interest on deferred payments.....	37. 22	12. 40
Sale of Lebanon Academy, im- provements, part payment.....		218. 75
Interest on deferred payment.....		40. 38
Right of way across Jones Male Academy.....	50. 00	
	<hr/> 2, 897, 600. 84	<hr/> 986, 490. 29

**\$3, 884, 091. 13**

**Creek Nation—**

	Creek.
Rental on tribal lands.....	378. 50
Sale of unallotted lands.....	22, 360. 10
Sale of town lots.....	799. 00
Sale of Tallahassee Mission, part payment.....	1, 283. 85
Interest on deferred payments.....	231. 07

**25, 052. 52**

**Seminole Nation—**

	Seminole.
Rental on tribal lands.....	761. 00
Sale of unallotted lands.....	1, 821. 20

**2, 582. 20**

**Total tribal collections..... 3, 911, 725. 85**

**Individual Indian Moneys:**

**Royalties—**

	Miscellaneous.
Oil and gas leases.....	4, 450, 631. 88
Coal and asphalt leases.....	34, 417. 04
Agricultural leases.....	44, 792. 20
Limestone, shale, sand, and gravel leases.....	687. 58
Tank site, water, and other leases.....	8, 271. 90
Lead and zinc leases.....	954. 84
Redeposits.....	3, 289. 79
Interest.....	133, 532. 92

**4, 676, 628. 15**

**Other Individual Indian Moneys—**

Proceeds from land sales.....	623, 824. 34
Transfers from tribal payments.....	215, 553. 64
Redeposits and other sources.....	30, 588. 87
Interest.....	65, 281. 01

**935, 252. 86**

War Savings Stamps purchases.....	503, 505. 60
Increase in value of War Savings Stamps.....	5, 306. 60

**503, 812. 20**

**Total Individual Indian Moneys..... 6, 120, 693. 21**

## Miscellaneous:

Class 1, sale of townsite maps and other Government property.....	Miscellaneous. \$611. 65	
Choctaw-Chickasaw Hospital, board.....	111. 60	\$723. 25
Class IV—		
Sale of lease blanks.....	1, 655. 35	
Sale of certified copies and State maps.....	4, 505. 90	
Filing fees, oil and gas leases, assignments and stipulations.....	10, 307. 00	
Pipe line inspection fees.....	425. 00	
Sale of property at Collins Institute.....	951. 60	
Interest on special deposits and individual moneys other than bank accounts.....	53, 533. 91	71, 378. 76
Class I, section 8, sale of certified copies of records under section 8, act of Apr. 26, 1906.....	20, 440. 89	20, 440. 89
Class V—		
Advertising fees on allotted lands.....	5, 701. 33	5, 701. 33
Refunds and reimbursements, appropriations.....	2, 077. 50	
Overpayments on advanced royalty.....	7, 131. 63	9, 209. 13
Total miscellaneous moneys.....		107, 453. 36
Total.....		10, 139, 872. 42
Received by Treasury warrants on requisition.....		6, 035, 648. 31
Total receipts.....		16, 175, 520. 73
Balance carried over from previous year:		
Congressional appropriation.....	34, 960. 69	
Tribal funds.....	251, 158. 20	
Miscellaneous moneys.....	18, 269. 85	
Individual Indian Moneys.....	8, 743, 876. 74	
Outstanding liabilities.....	1, 456. 42	9, 049, 721. 90
Grand total.....		25, 225, 242. 63

## Disbursements.

## CONGRESSIONAL APPROPRIATIONS.

Administration of Affairs, Five Civilized Tribes, Oklahoma, 1917:		
Traveling expenses.....		\$640. 93
Administration of Affairs, Five Civilized Tribes, Oklahoma, 1918:		
Salaries of regular employees.....	\$148, 437. 26	
Traveling expenses.....	21, 363. 30	
Office rents of field clerks.....	4, 025. 50	
Purchases and sundry expenses.....	3, 895. 09	177, 721. 15
Industrial Work and Care of Timber, 1917:		274. 20
Sundry purchases and expenses.....		
Industrial Work and Care of Timber, 1918:		
Salaries of regular employees, farmers.....	12, 741. 68	
Salaries of temporary employees, account of health drives.....	5, 867. 00	
Traveling expenses of farmers.....	5, 104. 43	
Traveling expenses, account health drive.....	3, 739. 91	
Sundry purchases and expense.....	454. 30	27, 907. 32
Probate Attorneys, Five Civilized Tribes, 1917:		
Traveling expenses.....	331. 74	
Office rents.....	22. 00	
Sundry purchases and expenses.....	331. 17	684. 91



Probate Attorneys, Five Civilized Tribes, 1918:			
Salaries of regular employees.....	\$63,708.14		
Traveling expenses.....	5,736.88		
Office rents.....	3,120.50		
Sundry purchases and expenses.....	3,299.51		
			\$75,865.03
Oil and Gas Inspector, Five Civilized Tribes, 1917:			
Sundry expenses.....			23.31
Oil and Gas Inspector, Five Civilized Tribes, 1918:			
Salaries of regular employees.....	4,405.00		
Traveling expenses.....	1,009.81		
Sundry purchases and expenses.....	2,285.19		
			7,700.00
Indian Schools, Five Civilized Tribes, 1917:			
Payments for aid of district schools in eastern Oklahoma.....			15,558.60
Indian Schools, Five Civilized Tribes, 1918:			
Salaries of regular employees.....	8,793.33		
Traveling expenses.....	1,124.10		
Sundry purchases and expenses.....	252.80		
Payments in aid of district schools in eastern Oklahoma.....	181,501.70		
			191,671.93
Pay of Indian Police, 1917:			
Miscellaneous purchases.....			5.94
Pay of Indian Police, 1918:			
Salary of regular employees.....	7,735.00		
Miscellaneous purchases.....	92.44		
			7,827.44
Relieving Distress and Prevention of Diseases Among Indians, 1918:			
Relief of sick and indigent Indians.....			1,086.71
Relieving Distress and Prevention of Diseases Among Indians, 1917-18 (Choctaw-Chickasaw Hospital):			
Salary of regular employees.....	487.49		
Sundry purchases and expenses.....	341.65		
			829.14
Increase of Compensation, Indian Service, 1918.....			16,468.51
Industry Among Indians, 1916-17:			
Purchase of seeds for distribution to Indians.....			183.05
Industry Among Indians, 1917-18:			
Purchase of seeds for distribution to Indians.....			9,852.46
Total disbursed from congressional appropriations.....			534,300.63

## TRIBAL FUNDS.

Tribal officers, salaries and expenses.....	21,831.60
Tribal attorneys, under contract, salaries and expenses.....	16,725.91
Refunds and expenses, account sale of tribal lands and collection of revenues.....	33,474.67
Expenses per capita and equalization payments.....	19,681.80
Per capita payments.....	3,204,074.98
Payments in lieu of allotments.....	27,102.49
Expenses and repairs of tribal schools and other tribal property.....	6,485.50
Total disbursed from tribal funds.....	3,329,376.95

## INDIVIDUAL INDIAN AND MISCELLANEOUS MONEYS.

Lease royalties:			
Paid to Indians.....	1,797,516.25		
Purchase of Liberty Loan Bonds.....	5,529,300.00		
Purchase of War Savings Stamps.....	294,865.20		
Income tax withheld.....	16,089.75		
			7,637,771.20

Other Individual Indian Moneys:		
Paid to Indians.....	\$631, 925. 46	
Purchase of Liberty Loan Bonds.....	5, 250. 00	
Purchase of War Savings Stamps.....	208, 640. 40	
		\$845, 815. 86
Overpayments on advanced royalties.....		9, 559. 71
Miscellaneous Receipts, Class IV:		
Salaries of regular and temporary employees.....	41, 521. 01	
Traveling expenses.....	4, 662. 11	
Purchases, printing, and sundry expenses.....	32, 069. 96	
		78, 253. 08
Miscellaneous Receipts, Class V:		
Advertising of allotted Indian land sales.....		2, 179. 33
Miscellaneous Receipts, Class I, Certified Copies, Section 8:		
Salaries regular employees.....	15, 014. 78	
Sundry purchases and expenses.....	2, 874. 64	
		17, 889. 32
Total Individual Indian and Miscellaneous Moneys.....		8, 591, 468. 50
Total disbursements.....		12, 455, 146. 08

## RECAPITULATION OF DISBURSEMENTS.

Congressional Appropriations:		
General office, Five Civilized Tribes.....	91, 921. 38	
Field service, appraisers, farmers, police, oil inspection, etc.....	157, 769. 64	
School supervision and aid to district schools.....	207, 230. 53	
Probate work and legal expenses.....	76, 549. 94	
Expenses Choctaw-Chickasaw Hospital.....	829. 14	
		534, 300. 63
Tribal Funds:		
Indian tribal officers and attorneys and expenses..	38, 557. 51	
Expenses tribal schools.....	6, 485. 50	
Tribal payments and expenses.....	3, 284, 333. 94	
		3, 329, 376. 95
Individual Indian Moneys Paid to Indians.....	2, 445, 531. 46	
Government war securities purchased for Indians.....	6, 038, 055. 60	
Miscellaneous payments and expenses.....	107, 881. 44	
		8, 591, 468. 50
Total actual disbursements.....		12, 455, 146. 08
Deposited Indian moneys to credit Five Civilized Tribes.....		
	3, 607, 863. 65	
Deposited account sale of Government property.....	611. 65	
Deposited to reimburse tribal funds.....	70. 68	
Deposited to reimburse appropriations.....	3, 534. 73	
Deposited to reimburse miscellaneous receipts.....	160. 95	
Deposited unexpended balances.....	1, 364, 102. 98	
		4, 976, 344. 64
Balances on hand June 30, 1918:		
Congressional appropriations.....	98, 270. 96	
Tribal funds.....	1, 314, 999. 07	
Miscellaneous moneys.....	3, 340. 58	
Individual Indian Moneys.....	5, 869, 196. 68	
Outstanding liabilities.....	1, 456. 42	
War Savings Stamps held for individual Indians...	506, 488. 20	
		7, 793, 751. 91
Grand total.....		25, 225, 242. 63

NOTE.—The amount of money on hand June 30, 1918, pending audit, aggregates \$583,859.09.

*Analysis of disbursements of tribal funds.*

	Choctaw.	Chick- saw.	Chero- kee.	Creek.	Seminole.	Total.
Salaries and expenses of tribal school employees.....	\$1,841.28	\$1,796.18	\$407.19	\$407.17	\$857.18	\$5,308.90
Expenses of per capita and equalization payments.....	10,559.58	4,288.40	-----	3,038.73	1,795.09	19,681.80
Insurance and repairs to tribal schools and hospitals.....	781.41	243.84	-----	-----	-----	975.25
Expenses account sale of tribal lands and collection of revenue.....	23,408.47	7,801.26	-----	252.61	-----	\$1,457.34
Refunds account tribal land sale.....	1,512.96	504.37	-----	-----	-----	2,017.33
Tribal officers and expenses.....	5,728.10	8,488.61	75.00	7,543.89	-----	21,831.60
Tribal attorneys and expenses.....	4,661.43	6,056.92	-----	10,668.99	-----	16,725.91
Payments in lieu of allotments.....	2,221,407.15	300.00	4,048.02	14,080.66	228.91	23,315.02
Per capita payments.....	2,221,407.15	605,619.15	2,437.61	-----	162,839.90	2,992,303.81
Payments, funds transferred to individual accounts.....	184,538.46	9,648.46	286.58	13,176.27	7,908.92	215,558.64
Legal expenses account of town lot suits.....	-----	-----	-----	201.35	-----	201.35
Total.....	2,454,381.79	644,745.14	7,252.35	49,369.67	173,628.00	3,329,376.96

**MAIL DIVISION.**

The mail division handled 864,935 items of mail, as compared with 880,712 during the fiscal year 1917, classified as follows:

**Incoming:**

Departmental letters.....	6,842
Miscellaneous letters.....	123,015
Stamped but unnumbered vouchers, applications, etc., approximately.....	250,000

Total..... 379,857

**Outgoing:**

Departmental letters.....	7,475
Miscellaneous letters.....	152,603
Circulars, form letters, etc., approximately.....	325,000

Total..... 485,078

Grand total..... 864,935

In addition to the above, there were mailed not less than 150,000 advertisements of allotted and unallotted lands, the grand total aggregating approximately 1,000,000 items.

**UNITED STATES OIL INSPECTOR.****OIL AND GAS OPERATIONS.**

A review of the conditions in the Oklahoma oil fields within the area of the Five Civilized Tribes during the past fiscal year must take into consideration the great and growing interest in the production of oil as a scientific, as well as a business, proposition. Operators in general are coming to realize that deposits of oil and gas are not inexhaustible. Heretofore, relatively speaking, there has been a large supply of crude oil at a low price with no particular attention to methods of conservation. The growing scarcity of high-grade crude oil, compared with the demand for same, and a very substantial increase in the market price, from \$1.70 to \$2.25 per barrel, have forced persons interested in this industry to a recognition of the fact

that every possible means must be employed to save crude oil as well as all by-products derived therefrom.

The proper setting of casing, cementing off water, checking productivity of individual wells, correct plugging of dry and abandoned wells, and various conservation methods established in other fields are now being adopted in the numerous oil districts of the State as a direct movement toward the saving of crude oil.

As an instance of the latter, a plant is being built to utilize waste oil, such as bad oil in bottoms of steel storage tanks, BS drawn off from gauging tanks, and all nonmerchantable oil that ordinarily accumulates in an oil field, in the manufacture of carbon black. This product heretofore has been considered worthless, but when burned in an insufficient supply of air, a certain amount of carbon black can be obtained, depending upon the efficiency of the process. It is certain, however, that many more important by-products than carbon black, such as dyes and other hydrocarbon chemical compounds useful in industrial operations, can be obtained by the proper treatment of this waste oil.

A tabulation showing development operations within the State, including the area of the Five Civilized Tribes and the Osage Nation, during the past fiscal year, by months, is as follows:

Month.	Oil wells.	Gas wells.	Dry holes.	Total.
July.....	467	19	91	577
August.....	343	12	79	434
September.....	443	49	153	645
October.....	656	43	182	881
November.....	538	50	156	744
December.....	412	36	164	612
January.....	286	39	118	443
February.....	309	36	100	445
March.....	490	57	153	700
April.....	547	53	184	784
May.....	563	64	162	789
June.....	667	102	234	1,003
1917-18.....	5,730	560	1,776	8,066
1916-17.....	4,508	366	896	5,750

The above record indicates a steady drilling campaign. A comparison with the records of the last fiscal year is interesting. There was an increase in total number of completions of 2,307, and in this case, it is significant to note that there were almost twice as many dry holes completed in the last fiscal year as in the former year, while there was no great difference in the number of oil and gas wells. The large number of failures may be accounted for in a large measure by the increase in the market price during the present year causing many wildcatters to take a chance in unfavorable localities.

#### PRODUCTION OF DIFFERENT FIELDS.

The estimated production of the various districts within the area of the Five Civilized Tribes with the total production for the first and last quarter of this year is herewith submitted.

*Production estimate from various fields in Five Civilized Tribes, Oklahoma.*

District.	First quarter.	Fourth quarter.	District.	First quarter.	Fourth quarter.
<b>Cherokee deep sand:</b>	<i>Barrels.</i>	<i>Barrels.</i>	<b>Creek Nation—Continued.</b>	<i>Barrels.</i>	<i>Barrels.</i>
Bird Creek.....	7,000	5,000	Glenn Pool.....	19,000	14,400
Bartlesville.....	6,290	5,900	Hamilton.....	980	280
Collinsville-Vera.....	400	500	Henryetta.....	1,000	325
Copan-Wann.....	1,500	1,500	Kellyville.....	400	400
Hogshooter.....	285	180	Lost City.....	380	170
	15,475	13,080	Morris.....	3,500	2,700
<b>Cherokee shallow:</b>			Muskogee.....	350	250
Nowata.....	4,890	2,800	Mounds.....	1,090	6,050
Delaware.....	1,635	1,150	Perryman.....	980	700
Chelsea.....	2,120	1,500	Schulter.....	320	250
Inola.....	275	135	Haskell-Stone Bluff.....	2,000	1,450
	8,920	5,585	Tiger Flats.....	2,000	1,650
<b>Cushing-Shamrock.....</b>	<b>57,000</b>	<b>48,500</b>		<b>53,900</b>	<b>47,210</b>
<b>Creek Nation:</b>			Allen.....	325	525
Bald Hill.....	8,000	6,680	Healdton-Fox.....	60,000	52,205
Bixby-Leonard.....	8,300	7,900	Total.....	195,620	167,105
Boynton-Cole.....	5,600	4,600			

#### NEW POOLS.

A general survey of development operations in the area of the Five Civilized Tribes discloses but two new pools, the Youngstown and Yahola districts, neither of which can, in any way, be cited as of particular commercial significance, on account of the relatively small area covered as compared with the Fox, Shamrock, and Cushing fields, their small average daily production, and their rapid decline.

#### YOUNGSTOWN POOL.

The Youngstown field, as at present developed, is practically inclosed within two sections, 25 and 36, township 14, range 11.

The first well was completed December 5, 1917, on the Huckaby farm in the SE.  $\frac{1}{4}$  SE.  $\frac{1}{4}$ , sec. 25, T. 14, R. 11, with rated capacity of 1,500 barrels daily. This well was drilled deeper on March 2, 1918, and produced oil at the rate of 100 barrels per hour for several days. Sand was encountered at about 2,200 feet. Further development was rapid, and at the close of the fiscal year no less than 60 wells have been completed in these two sections.

The initial capacity of new wells decreased rapidly. The total production at this time is about 5,500 barrels daily. A number of failures located in several directions from the present pool indicates that there will be no substantial extension of the field beyond the confines of these two sections.

#### YAHOLA.

About 5 miles north of the Boynton oil fields the Yahola Pool was opened by completion of an 800-barrel well during the first quarter of the present year. The development at the close of the fiscal year is principally confined to sections 16 and 17, township 15 north, range 16 east. The producing sand is found from 1,250 to 1,350 feet, and drilling conditions are good. At this time, there are about 15 wells completed in these two sections. The Cosden Pipe

Line Co. has extended its facilities to the district so that all of the production will be taken care of. Heretofore this territory has been considered a gas field only, due to the fact that 4 or 5 gas wells, all from 8 to 10 million cubic feet capacity, have been completed in this township.

#### FOX POOL AND VICINITY.

This territory is not as yet an oil field, but still retains first place as the gas producing area of the State. The northwest-southeast trend of the Fox gas area has been appreciably lengthened, by the recent drilling in of a gas well in section 31, township 2 south, range 3 west, with a capacity of 20 million cubic feet daily. The distance from this well to the northwest extension of the present Fox area is about 6 miles, and therefore probably means the addition of much gas territory to this field.

#### SHALLOW SAND DEVELOPMENT (VICINITY OF FOX).

The shallow sand development in the vicinity of the western edge of the Fox gas area, sections 13 and 24, township 2 south, range 4 west, is attracting considerable attention at the close of the present fiscal year by reason of discovery of oil at depths ranging from 350 to 1,150 feet. No less than 14 wells have been completed to date in the above sections.

Some of these wells are credited with a daily capacity of 50 barrels, but it is not believed that after they are pumped regularly and the full production is taken by the pipe lines, they will produce more than an average of from 15 to 20 barrels each. The Magnolia Pipe Line Co. will have its lines extended to this district within the next 10 days. This will enable the producers to market their production, and encourage other operators to drill new wells.

#### DEEPER DRILLING AT HEALDTON.

Considerable interest has been aroused in the discovery of a producing oil sand at a greater depth than the normal producing area of the Healdton field, namely a depth of 2,750 feet in well No. 14, in the northeast corner of section 4, township 4 south, range 3 west, the Allie Daney allotment.

The sand which is estimated to be 27 feet in thickness is reported to be very hard and close grained. This well was shot September 5, 1917, and is credited with a production of 15 to 20 barrels daily since that time. The oil is 37° to 41° gravity and is a much better grade of crude oil than the ordinary Healdton production. Inasmuch as the lower producing sand is located within the proven area of the field, it would appear reasonable to assume that this producing horizon would cover a large continuous area, but this does not seem to be the case as indicated in a general way by the drilling of scattered tests in sections 11, 16, 18, and 24 of township 4 south, range 3 west, all of which have failed to show a producing sand at lower depths.

However, five producing wells from a sand at a depth of 1,950 feet have been drilled in section 25, township 4 south, range 3 west, and two or three wells have encountered a producing sand at about 1,350 feet in sections 2 and 3 of township 4 south, range 3 west. These producers, however, are surrounded by failures, so that considering

the present status of deep-sand development, there are no favorable indications that the Healdton field will ever become important as a deep-sand proposition.

### PIPE LINES.

During the past fiscal year several notable extensions have been made and are being made to the already elaborate pipeline systems serving the Mid-Continent field of Oklahoma, as follows:

The Prairie Oil & Gas Co. is laying an 8-inch line, approximately 285 miles in length from Tulsa to the Texas fields. The survey of the line extends through the Healdton field and will give this field additional pipeline facilities, should the company desire to put in the necessary lateral connections.

The Mid-Co Petroleum Co. began active construction work on March 29, 1918, on an 8-inch line from Tulsa to the Billings and Garber producing fields, a distance of about 56 miles. This line is practically completed now and will prove to be a very helpful factor in getting the crude oil produced in that district to market.

The Roxana Petroleum Co. has built and has in operation a 10-inch line from Cushing, Okla., to St. Louis, Mo., at which point a 20,000-barrel refinery is located ready to begin operations.

During the year the Sinclair Oil & Gas Co. completed and has in operation an 8-inch line connecting its Oklahoma and Kansas productions with Chicago, Ill., where extensive preparations are being made to handle the capacity of the line, both from a refining and distributing standpoint. The Sinclair organization also connected up its Cushing and Healdton productions by an 8-inch line, and is now making a survey to extend this line to the Gulf, tapping the Texas field en route.

The Gulf Pipe-Line Co. has completed a 130-mile extension from Drumright through Yale to their famous Shumway fields in Kansas, near Eldorado.

### PIPE LINE FACILITIES.

The purchasing pipe lines and independent agencies taking oil in the Cushing and Healdton fields, together with a number of wells which they serve and the average daily production separated as to the departmental and commercial acreage, according to recent tabulation, are as follows:

Purchaser or pipe line company.	Departmental.		Commercial.		Total.	
	Estimated average daily production.	Number of wells.	Estimated average daily production.	Number of wells.	Estimated average daily production.	Number of wells.
<b>CUSHING FIELD.</b>						
	<i>Barrels.</i>		<i>Barrels.</i>		<i>Barrels.</i>	
Magnolia.....	2,789	95	2,819	191	5,608	286
Empire.....	170	11			170	11
Texas.....	348	14	3,471	127	3,819	141
Sinclair-Cudahy.....	1,457	130	3,038	212	4,495	342
Pierce.....	1,040	72	2,238	160	3,278	232
Coeden.....	1,860	108	3,235	216	5,095	324
Coeden for Constantine.....	77	20	202	74	279	94
Continental.....	1,620	58	254	27	1,874	85

Purchaser or pipeline company.	Departmental.		Commercial.		Total.	
	Esti- mated average daily production.	Number of wells.	Esti- mated average daily production.	Number of wells.	Esti- mated average daily production.	Number of wells.
<b>CUSHING FIELD—continued.</b>						
Gulf.....	<i>Barrels.</i> 1,177	48	<i>Barrels.</i> 1,854	146	<i>Barrels.</i> 3,031	194
Hill Oil Co. (not connected).....						
Interstate Refinery.....	573	37	1,648	64	2,221	101
Indianoma.....	650	17	647	27	1,297	44
Prairie.....	1,454	97	7,337	373	8,791	470
C. B. Shaffer.....	44	12	2,783	189	2,827	201
Sapulpa Refinery.....	636	32	1,291	173	1,927	205
Southern Oil Corporation.....	552	39	894	70	1,446	109
Uncle Sam.....	5	2	25	8	30	10
Yarholo Pipe Line.....	1,159	35			1,159	35
American Refinery.....			32	19	32	19
Kingsmith Refinery.....			91	34	91	34
Lake Park Refinery.....			31	6	31	6
North American Refinery.....			173	33	173	33
Oklahoma Pipe Line.....			761	81	761	81
S. W. Scott Refinery.....			45	9	45	9
Sun Refining Co.....			15	2	15	2
Webster Refining Co.....			8	1	8	1
Oilton Refining Co.....			225	10	225	10
	15,611	827	33,117	2,252	48,728	3,079
<b>HEALDTON FIELD.</b>						
Magnolia.....	1,124	32	14,563	511	15,687	543
Empire.....	1,708	80	5,350	201	7,058	281
Texas.....	510	21	2,682	160	3,192	181
Stclair-Gulf.....	250	18	2,180	111	2,430	129
Fornes.....	170					
Carter.....			3,720	103	3,720	103
Pierce.....	1,255	106	3,530	127	4,785	233
C. & A.....	136	4	3,311	160	3,447	164
Wilson.....	927	46			927	46
Nyanza.....			60	7	60	7
Roxana.....	77	10	6,225	149	6,302	159
Watkins Fee.....			80	9	80	9
Fee: Westheimer & Daube.....			350	22	350	22
	6,057	317	42,051	1,560	48,108	1,877

<sup>1</sup> See Empire.

From the above record, it is noted that the department exercises supervision over about one-eighth of the production of the Healdton field and one-third of the output of the Cushing district. Pipe line facilities of the two fields are far in excess of all requirements, and in consequence there is considerable competition in the purchase of available oil.

This tabulation was compiled as of June 20, 1918, but within the last three weeks there has been considerable change in purchasers, particularly in the Healdton field, where the regular pipe lines are failing to pay premiums and are being deprived of their supply of crude oil.

#### STORAGE OF OIL.

A close estimate of oil in storage in the Cushing and Healdton fields at the close of the fiscal year was as follows:



*Cushing field.*

[Amount of oil week ending June 14.]

<b>Standard group:</b>			
Carter Oil Co.....	11,034,200		
Prairie Oil & Gas Co.....	9,762,200		
Standard of Indiana.....	3,114,785		
Magnolia Petroleum Co.....	166,200		
			24,077,385
<b>Miscellaneous refinery group:</b>			
Sinclair Oil & Gas Co.....	450,000		
Gulf Pipe Line Co.....	2,867		
Cosden Pipe Line Co.....	34,780		
Pierce Oil Corporation.....	37,800		
Indiahoma Refining Co.....	26,400		
C. B. Shaffer.....	464,073		
The Texas Co.....	4,804,875		
			5,528,721
<b>Independent interests:</b>			
Roxana Petroleum Co.....	30,450		
Silurian Oil Co.....	90,400		
			120,850
<b>Miscellaneous.....</b>			300,000
<b>Total.....</b>			30,026,956

*Healdton field.*

Owner.	Tanks.	Stock.	Owner.	Tanks.	Stock.
Ardmore Refining Co.....	1	15,000	Pierce-Fordyce.....	2	10,000
Carter Oil Co.....	45	2,548,000	Roxana Petroleum Co.....	24	
Do.....	8	280,000	Rockland Oil Co.....	3	159,000
Cobden Fuel Oil Co.....	27	1,235,000	Saddle River.....	26	1,325,000
Empire Pipe Line.....	4	71,000	Sinclair-Gulf.....	19	876,000
Gates Oil Co.....	1		Texas Co.....	15	645,000
Gilmer Oil Co.....	5	237,000	Do.....	2	72,000
Humble Oil Co.....	3	53,000	Terminal Refining Co.....	1	51,264
Hamon & Colcord.....	2	36,000	Westheimer & Daube.....	3	81,000
J. L. Hamon.....	1	30,000			
Magnolia Petroleum Co.....	64	3,353,000	Total.....	268	11,110,264
Pierce-Fordyce.....	7	33,000			

The supply of oil in storage at Healdton is being constantly drawn upon as the figures show a decrease of approximately 126,000 barrels during the latter half of June. This decrease was considered in the above record. No oil is being run to storage at the close of the fiscal year.

## REFINERIES AT HEALDTON.

The growth of the independent refining business in the southern field in the vicinity of Ardmore, Okla., has been one of the noteworthy developments during the past fiscal year. The district is already well supplied with pipe-line facilities, and the entrance of the independent refineries with consequent increased demand for crude oil has stimulated the market for oil in these various fields to an unusual degree as evidenced by the fact that a premium ranging from 20 to 30 cents over the posted market price of \$1.45 is being paid to oil producers who care to sell to these independent concerns. Some of the refineries are well located in the immediate vicinity of the field, and others at Ardmore, there being railroad facilities at both points. Following is the list of refineries in the Healdton field

in operation, and also those under construction, with their estimated capacity:

Company.	Location.	Capacity.
		<i>Barrels.</i>
Forbes Refining Co. ....	Wirt, Okla. ....	200
Terminal Refining Co. ....	Wilson, Okla. ....	1,000
Wilson Refining Co. ....	do. ....	1,000
Nyanza Refining Co. ....	do. ....	1,000
Ardmore Refining Co. ....	Ardmore, Okla. ....	8,000
Imperial Refining Co. ....	do. ....	8,000
Chickasaw Refining Co. ....	do. ....	8,000
Cameron Refining Co. ....	Ardmore, Okla. (under construction) ..	2,500
Peoples Refining Co. ....	Ringling, Okla. (under construction) ..	2,000
Ringling Refining Co. ....	do. ....	1,000
46th Star Refining Co. ....	Healdton, Okla. (under construction) ..	2,500
<b>Total</b> .....		<b>27,200</b>

#### LOSSES BY FIRE.

Fire losses during the past fiscal year on tank farms and leases as far as reported to this office were as follows:

	<i>Barrels.</i>
Cushing field .....	294,507.96
Healdton field .....	214,800.00

#### CASING-HEAD GAS

The importance of the casing-head gas industry in supplementing the available supply of gasoline obtained in ordinary refining operations can not be overestimated, both as relating to the demands of war and to the general policy of conservation of natural resources.

The various grades of casing-head gas suitable for manufacture of gasoline, conditions under which it is marketed, as between sellers and users, transportation facilities, water supply, locations of plants, quantities of gas available, and numerous other considerations have resulted in great variations in prices paid, and in consequence the matter of determining a fair and uniform method of arriving at the lessor's interest in such gas has presented an unusual difficulty. The producers and gasoline manufacturers, after presenting various phases of the subject to the department, eventually agreed upon a method of testing casing-head gas. This was placed before the department and adopted in substantially the form submitted and such procedure embodied in regulations pertaining to casing-head gas approved by the department August 10, 1917.

A conscientious effort has been made in cooperation with producers, both users and sellers, to carry out the spirit of these regulations. The basis of settlement and the prices for gas according to schedule and regulations is low enough to give considerable latitude to operators, thus enabling them to make contracts at better prices than specified in same. Some of the larger corporations, in their mutual agreements with their subsidiaries providing for the utilization of their own casing-head gas, are within the requirements without resorting to a physical test of the gas.

The difficulties and resulting inaccuracy of tests are due to a number of conditions, some of which may be summarized as follows:

(1) The time of the year taken, as climatic condition and temperature have a bearing on results.

(2) Conditions of lease, such as wells on the pump or off, cleaning wells, and other lease work.

(3) Point of sampling the gas and conditions under which the sample is taken.

(4) Improper design of machine, such as lack of cooling surface, inefficient compression, faulty manipulation, poor connections and many defects in mechanical equipment of various kinds designed to make these tests.

(5) Natural errors creeping in when small quantities of gas are tested, together with incorrect meters.

(6) Excessive evaporation in open air field tests.

By reason of these problems which have arisen in the actual operation of a field-testing outfit, one must conclude that much must yet be done before a uniform and fairly accurate method of testing the productivity of small quantities of casing-head gas which will compare favorably with plant operations is fully realized. In a general way, the present adopted method of testing casing-head gas has been given a comparatively short trial only, and it is still too early to say that it is either unsatisfactory or that it is the best that could be devised under the numerous and widely different conditions. However, the design of a machine for this purpose should be worked out along the lines of general practice in the field, that is, two-stage compression, adequate cooling surface, mixture of both high and low grade products before drawing same off from the accumulators. The measurement of the gas by piston displacement is also preferable to the ordinary grade of meters which are used on these machines to determine the quantity of gas tested. These are the simplest essentials, as it never can be hoped to attain or parallel exactly plant operations with a field-testing outfit because of the numerous modifications, variations, and refinements in practice that are being worked out in different plants to increase and save the yield of gasoline per 1,000 cubic feet gas treated.

The following is a list of casing-head gasoline plants that have been constructed, and are in addition to those submitted in the last annual report:

## CUSHING FIELD.

Companies.	Location.			Gas capacity.	
	Section.	Township.	Range.	Units.	Cubic feet.
Carter Oil Co.....	8	18	7	4	2,000,000
Do.....	28	17	7	2	1,000,000
Rowland Gasoline Co.....	4	16	7	8	3,000,000
Oklahoma Natural Gas Co.....	10	16	7	Absorb.	1,000,000

## HEALDTON FIELD.

Magnolia Petroleum Co.:					
Plant No. 1.....	4	4 S.	3 W.	3	1,500,000
Plant No. 2.....	31	3 S.	3 W.	4	2,000,000
Plant No. 3.....	28	4 S.	3 W.	3	1,000,000
Gates Oil Co.....	15	4 S.	3 W.	6	3,000,000

## PLANTS UNDER CONSTRUCTION.

Merrick Gasoline Co.....	5	4 S.	3 W.	2	1,000,000
Carter Oil Co.....	5	4 S.	3 W.	3	1,500,000
Superior Petroleum Co.....	8	4 S.	3 W.	6	3,000,000
Ohio Cities Gas Co.....	9	4 S.	3 W.	4	2,000,000
Carter Oil Co.....	24	4 S.	3 W.	3	1,500,000
Humble Oil Co.....	24	4 S.	3 W.	4	2,000,000
Magnolia Oil Co.....	15	4 S.	3 W.	2	1,000,000

<sup>1</sup> Estimated capacity

Following is a brief summary of office and field work showing volume and character of same:

Separate written reports on minor leases.....	147
Appraisements for probate attorneys.....	51
Field reports as to adequacy of bonus.....	29
Office reports as to adequacy of bonus.....	1,315
Bonus reports on leases outside of Five Tribes.....	42
Bonus letters written.....	120
Field appraisements oil and gas value.....	74
Office appraisements.....	2,224
Special field reports on development and operation.....	121
Investigation of complaints and offset wells.....	88
Gas wells tested.....	16
Stipulations and assignments.....	69
General field reports.....	90
Miscellaneous reports.....	129
Current letters.....	253
Reports upon leases upon which daily gauges are taken and reports made.....	285
Casing-head gas tests.....	93

## OIL AND GAS INSPECTORS.

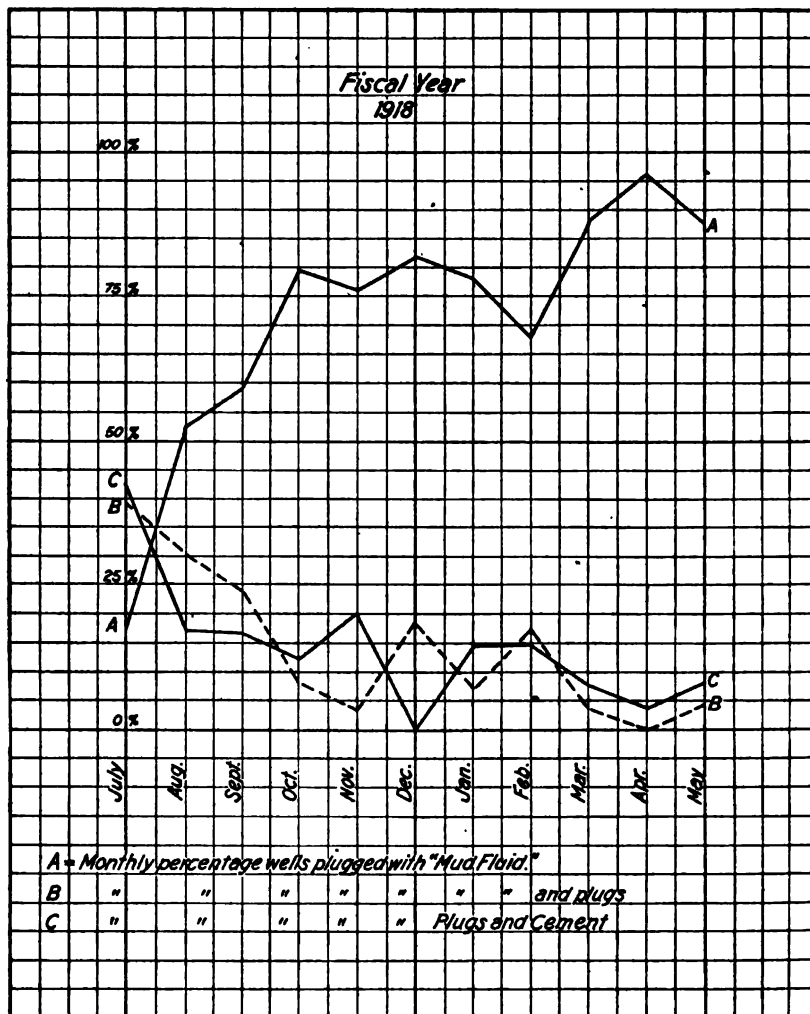
In preparing the report for the oil and gas inspectors for the fiscal year 1918, an attempt has been made to condense all information as much as possible. All information of such character that would permit of the arrangement has either been put in the form of curves or tabulations. This is believed advisable because of the necessity of condensing all information and giving nothing but essential facts.

Outside of the fact that the office has been considerably hampered by war conditions during the year, principally in the change of personnel, it is felt that substantial progress has been made in carrying on the work toward the desired ends in the matter of maintaining production at a high standard and the prevention of waste.

In keeping with the general policy of the Petroleum Division of the Bureau of Mines, it has been felt that it is far better to solicit and obtain the cooperation of oil and gas producers than to use forceful methods which are set forth in the regulations. It has been believed also that far better results can be obtained by demonstrating the advisability of different methods and showing the advisability of their adoption in such form that the producers and operators may see the financial necessity of following out the suggestions of this office. This policy has been pursued during the entire year and, with very few exceptions, has met with excellent results. There have been a few cases, however, in which considerable force was necessary in order to secure a compliance with the regulations. In practically all of these cases the requirements of the regulations have been met without any serious misunderstanding with the operators, or without the application of penalties which might have been applied.

## DEVELOPMENT OF OIL AND GAS PROPERTIES.

During the fiscal year 1918 there were a total of 454 producing wells drilled. This includes both oil and gas wells. At the same time there were 154 wells plugged. This includes both new wells drilled and old wells abandoned.



On the accompanying curve sheet are shown the number of producing wells drilled monthly, the number of wells plugged monthly, as well as the average number of producing wells drilled monthly, and the average number of wells plugged monthly.

The curve A shows the number of producing wells drilled monthly. The dotted line A' shows the average number of wells drilled monthly. The curve B shows the number of wells plugged monthly. Curve B' shows the average number of wells plugged monthly.

In this connection it might be well to note that there have been very few wells brought in on new leases, or leases that had not been drilled previously. The great majority of the producing wells reported are on leases where production has been brought in prior to this fiscal year. A considerable number of the wells reported as plugged represent wells which were drilled in new territory and were found to be dry.

It is also noticeable that on other reservations, outside of the Five Civilized Tribes with the exception of the Osage, there have been very few wells drilled on restricted Indian lands. On the 1st of July, 1918, considerable land was found to be leased in the Kiowa and Otoe Reservations and notification cards have been received showing that drilling operations would start in those reservations within a short time. On all other reservations where land has been reported as being under lease, there has been no development to this date. Furthermore, after a study of the general oil situation and especially with reference to the geological work that has been done, it seems very unlikely that any large body of oil-producing land will be opened up in any of these reservations, with the possible exception of the Kiowa.

It is also believed that the great majority of land still restricted, outside of that already producing, will produce very little oil, as quite a comprehensive and thorough examination has been made by numerous companies in practically all localities. It is reasonable to assume, therefore, that from this time forward, the development of oil properties on restricted Indian lands within the Five Civilized Tribes will show a gradual and perhaps a rapid decline. This also holds true of all other lands in eastern Oklahoma, except the Osage. While there may be small isolated pools developed, nothing of any great magnitude can be expected.

#### INDIAN LANDS UNDER LEASE IN OKLAHOMA IN JANUARY, 1918.

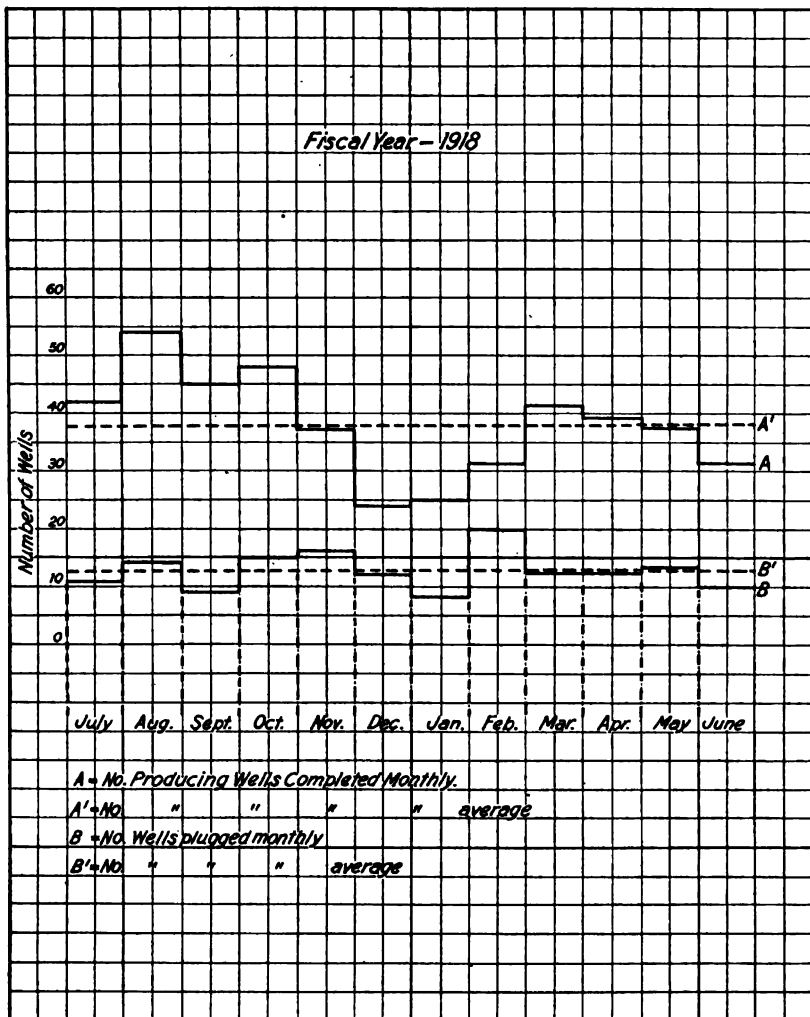
During the month of January, 1918, upon the request of the Bureau of Mines at Washington, D. C., for the congressional committee on Public Lands, an investigation was completed showing the total producing and nonproducing acreage held under lease for oil and gas operation by companies and individuals on all restricted Indian and tribal lands in Oklahoma.

The following tabulation shows these data in total for each tribe or nation:

Nation or tribe.	Non-producing acreage	Acreage on which either producing oil or gas wells occur
Five Civilized Tribes.....	253, 622	93, 396
Osage.....	138, 045	89, 906
Otoe.....	59, 340	160
Kiowa.....	5, 321	None.
Pawnee.....	42, 706	956
Sac and Fox.....	17, 357	None.
Cheyenne and Arapahoe.....	12, 498	None.
Cantonment.....	960	None.
Total.....	549, 340	184, 418

## METHODS OF PLUG AND ABANDONED WELLS.

Due to the fact that the old methods which had been previously used in the Mid-Continent field had been found ineffective, it was decided during the early part of the fiscal year to advocate the use



of mud fluid in the plugging of all wells. The accompanying curves show the increase in the use of mud fluid in plugging wells.

The method represented by the curve A shows the monthly percentage of wells plugged by mud fluid. This method has been almost universally advocated by the Muskogee office of the bureau, first, because of the certainty of securing a good job of plugging, and, second, because of the facility of the work and the reduced cost over old methods.

The curve B shows the method whereby the wells were plugged by the use of mud fluid and plugs. This method has been found to be dangerous, because it breaks the pressure exerted on any given formation that would normally result if the plugs were omitted.

The secret of success in using mud fluid in a continuous column from the bottom of the hole to the surface of the ground depends on two factors: First, the consistency of the fluid, free from coarse material; and, second, the pressure built up by continuous column of mud on all formations. When plugs are placed in the well, this column is naturally broken and in conjunction with the breaking of the column the pressure exerted on any given formation is reduced and is only equivalent to the pressure exerted from the bottom of each plug to the top of the next.

The curve C shows the method formerly employed where plugs and cement were used. This method has been found to be dangerous and expensive—dangerous, because of the uncertainty of the accuracy of logs, and expensive, because it has often been found necessary to redrill wells and plug them over again.

By glancing at the accompanying curves it will be readily seen that the mud-fluid method has met with great favor and is rapidly becoming the method that is used in all cases. There seems little doubt but that in a short time this method will become universally used in the Mid-Continent field, and therefore this phase of the work of the inspectors is gradually becoming less, and no doubt will arrive at the point in the near future where further attention will be unnecessary.

#### REPORTS RECEIVED IN THE OFFICE DURING FISCAL YEAR.

Number of notification to drill cards received.....	463
Number of notification to deepen cards received.....	36
Number of notification to plug cards received.....	249
Plugging records received.....	339
Final logs of completed wells received.....	699
Semiannual lease status reports received.....	1,070

In the above tabulation of reports received at the office during the fiscal year it will be noted that the number of final logs of completed wells received and the number of plugging records received vary from those shown in another part of the report. This apparent discrepancy is due to the fact that many of the records which were received in the earlier part of the year were on wells that had been either drilled or plugged prior to the 1st of July, 1917, and the records were not received until at a later date.

#### CENSUS OF OIL WELL CASING.

During most of the month of December, 1917, and the early part of January, 1918, the entire force of inspectors and clerical assistants was engaged in collecting and tabulating information showing the available supply of oil well casing and tubing of all sizes in the State of Oklahoma.

In this work the State was divided into districts and each district assigned to an inspector. It was the duty of the inspector in each locality to visit all companies, either operating or dealing in oil well supplies and to secure and tabulate all casing and tubing not



in actual use in the wells, or in lines. This information was collected at the request of the War Trade Board and was part of a survey taking in the total available supply of products of this character throughout the United States. The tabulated data were forwarded from this office to the Petroleum Division of the Bureau of Mines at Washington.

#### REFINERIES IN OKLAHOMA.

During the month of July, 1917, a survey of the refineries in the State of Oklahoma was made at the request of the Council of National Defense. In this work every refinery in the State was visited and data were obtained on the amounts of crude treated with the various products and by-products obtained.

This investigation showed that there were 65 refineries in the State, with an aggregate capacity of 213,875 barrels daily. This included "cracking" and "topping" plants. This work required more than one month of the entire time of one inspector.

The complete and detailed reports were furnished to the United States Bureau of Mines at Washington as a part of a general report covering the entire refining industry of the United States.

#### USE OF PORTLAND CEMENT.

During the fiscal year 1918 very gratifying progress was made in the use of Portland cement to exclude water from producing oil sands. As far as it is possible to determine, the first wells were cemented in the Cushing field in the latter part of the fiscal year 1917, under the directions of the inspectors working out of this office. This work was reported in the last annual report.

Most of the work accomplished in the Cushing field has been on "bottom water" problems. This work has been done very largely by the producers with advice and assistance of this office. There have been very few wells worked on where a second attempt was necessary to produce desired results. As will be readily seen from the list of wells cemented, a complete "shut-off" of water was obtained in the majority of wells, while in all of them there was a great decrease in the amount of water handled and a very marked increase in the oil production. In a great many cases where a complete "shut-off" was not obtained it is reasonable to assume that the water comes from some source other than the bottom. It is intended, as soon as possible, to determine the source of this water and to take steps to exclude it from the wells. One of the greatest sources of gratification has been that many operators have learned the advisability of the use of cement and its efficiency over old methods in "shutting off" water and are proceeding vigorously with its use at this time.

Following is given a list of wells cemented, showing the decrease in water and the increase in oil and the gross value of the increased production daily at the present market price of oil.

## SINA CROW (SEC. 5, 18 N., 7 E.). OHIO CITIES GAS CO.

	OIL.	Water.	Gross value increased production daily.
Well No. 8:	<i>Barrels.</i>	<i>Barrels.</i>	
Before.....		All water.	
After.....	28		\$85.50
Well No. 12:			
Before.....		All water.	
After.....	60		135.00
Well No. 16:			
Before.....		All water.	
After.....	28		68.00

## WALTER STARR (SECS. 8 AND 17, 18 N., 7 E.). SILURIAN OIL CO.

Well No. 2:			
Before.....		All water.	
After.....	15		\$33.75
Well No. 5:			
Before.....		All water.	
After.....	15		33.75
Well No. 6:			
Before.....		All water.	
After.....	45		101.60
Well No. 14:			
Before.....		All water.	
After.....	45		101.60

## VIDA M. WAY (SEC. 7, 18 N., 7 E.). MAGNOLIA PETROLEUM CO.

Well No. 16:			
Before.....	15	150	
After.....	20		\$11.25

## MUSSELLEUM FARM (SEC. 8, 18 N., 7 E.). MAGNOLIA PETROLEUM CO.

Well No. 19:			
Before.....		All water.	
After.....	7		\$15.75
Well No. 25:			
Before.....		All water.	
After.....	7		15.75
Well No. 24:			
Before.....	6	125	
After.....	30		54.00
Well No. 14:			
Before.....		All water.	
After.....	8		18.00
Well No. 4:			
Before.....			
After.....	5		11.25

## THOMAS CONNOR (SEC. 8, 18 N., 7 E.). MAGNOLIA PETROLEUM CO.

Well No. 15:			
Before.....		All water.	
After.....	6		\$12.50

## BENJAMIN VANCE (SEC. 7, 18 N., 7 E.). MAGNOLIA PETROLEUM CO.

Well No. 14:			
Before.....	25	150	
After.....	40		\$33.75

## FIVE CIVILIZED TRIBES OF OKLAHOMA.

## RUSSELL THOMPSON (SEC. 2, 17 N., 7 E.). MAGNOLIA PETROLEUM CO.

	OIL.	Water.	Gross value increased production daily.
Well No. 5:	Barrels.	Barrels.	
Before.....	60	150	
After.....	65		\$33.75

## SAMUEL E. VANCE (SEC. 6, 18 N., 7 E.). MAGNOLIA PETROLEUM CO.

Well No. 15:			
Before.....	15	All water.	
After.....			\$33.75
Well No. 16:			
Before.....	3	125	
After.....	10		15.75
Well No. 25:			
Before.....	5	All water.	
After.....			11.25
Well No. 21:			
Before.....	5	150	
After.....	15		22.50

## MOLLIE JONES.

Well No. 1:			
Before.....		All water.	
After.....	5		\$11.75

## MALEY YARHOLA (SEC. 8, 17 N., 7 E.). ROXANA PETROLEUM CO.

Well No. 11:			
Before.....	5	30	
After.....	12	3	\$15.75
Well No. 20:			
Before.....		45	
After.....	60		135.00
Well No. 21:			
Before.....		100	
After.....	40		90.00
Well No. 23:			
Before.....	15	50	
After.....	17.5	10	5.62
Well No. 27:			
Before.....		100	
After.....	157		352.25

## JACKSON BARNETT (SEC. 5, 17 N., 7 E.). CUSHING GASOLINE &amp; PETROLEUM CO.

Well No. 11:			
Before.....		100	
After.....	10		\$22.50
Well No. 15:			
Before.....	4	125	
After.....	15	10	24.75

## SAMUEL RICHARDS (SEC. 4, 17 N., 7 E.). TIDAL OIL CO.

Well No. 10:			
Before.....		100	
After.....	10		\$22.50

## JEANNETTE TIGER (SEC. 16, 17 N., 7 E.). TIDAL OIL CO.

Well No. 8:			
Before.....		100	
After.....	5	5	\$11.25

## BENOCHÉ FIXICO (SEC. 17, 18 N., 7 E.). TIDAL OIL CO.

	Oil.	Water.	Gross value increased production daily.
	<i>Barrels.</i>	<i>Barrels.</i>	
Well No. 1:			
Before.....		100	
After.....	100	10	\$225. 00
Well No. 6:			
Before.....		100	
After.....	130	7	292. 50
Well No. 8:			
Before.....		100	
After.....	140	5	314. 50
Well No. 9:			
Before.....		100	
After.....	5	5	11. 25

This list shows that there have been a total of 35 wells cemented in the north end of the Cushing field, and the test following the cementing showed that there was an actual increase on this number of wells of 1,067.5 barrels per day above the amount of oil produced before the work was started. This is an average increase of 30.5 barrels per well per day.

The tabulation also shows that the total daily gross proceeds from the sale of this oil at the present market price, \$2.25 per barrel, would be equivalent to \$2,401.57. In none of these cases has the work required cost the producing company over \$200 per well as an extreme maximum. Therefore it is reasonable to assume that the total cost of cementing the 35 wells at the maximum has not been over \$7,000. Assuming that this production will continue for a period of one year on the 35 wells, there would be accumulated in that time total gross proceeds of \$867,577, which cost the producer, as shown above, a maximum of not over \$7,000. Work of this character, therefore, is well worth while and needs no further comment or argument to show its value.

In this connection it might also be well to state that the work so far done in the Cushing field has been in those localities where water has been giving the greatest amount of trouble. By referring to the above list, it will be noticed that a great many of the wells which are now producing oil in considerable quantities produced nothing but water before the work was done on them.

Also before the close of the fiscal year considerable progress has been made in demonstrating to the producers in the Healdton field the advisability of using cement. The first use of cement in the Healdton field was for the cementing of casing above the producing sand to prevent the water from flowing in from above the producing horizon. One or two wells had been cemented for "bottom water," and, after finding that it would work, gradually the producers are becoming interested in it and it is very reasonable to anticipate a very marked increase in the cementing of wells in the Healdton field during the fiscal year 1919.

The following list shows wells which were "standing in" cement on the 1st of July, 1918. These wells have not been tested as yet, but excellent results are anticipated, because of the results obtained on other wells in the immediate vicinity.

Well No.	Lessor	Lessee.
16.....	Tommy Atkins.....	Charles Page.
13.....	Eastman Richards.....	Gypsy Oil Co.
5.....	Benoche Fixico.....	Tidal Oil Co.
8.....	Lessey Yarhola.....	Do.
15.....	Maley Yarhola.....	Roxana Petroleum Co.
24.....	do.....	Do.
12.....	Eliza Yarhola.....	Carter Oil Co
28.....	do.....	Do.
16.....	do.....	Do.
13.....	Susie Crow.....	Ohio Cities Gas Co.

## SPECIAL FIELD PROBLEMS.

## REPORT ON SOUTHEAST EXTENSION OF THE HEALDTON FIELD.

Because of the fact that the majority of fields in Oklahoma were becoming flooded with water due to the lack of proper care of the wells, it was decided early in September, 1917, to make an investigation of a certain area in the southeast extension of the Healdton field to determine the conditions with a view of lending any possible assistance toward a better understanding of the prevailing conditions and the use of the information thus gained as an assistance in preventing further encroachment of water and in remedying those wells in which water was already being produced.

The area covered comprised all of section 24, parts of sections 25, 14, 13, -6, and 23, in township 4 south and range 3 west; and parts of sections 18, 19, and 30, in township 4 south and range 2 west. The total areas covered embraced approximately 2 square miles.

The ultimate objects as mentioned before, which it was hoped to attain were—

First. A better understanding of the underground structure and the conditions affecting the occurrence of water and the application of this knowledge in preventing the spread of water throughout the field.

Second. As a demonstration to the operators concerned in the locality, as well as to other operators, that work of this kind comprised in the report is of a financial benefit, in that it aids in basing their operations on accurate data rather than on "guesswork," so often employed.

Third. Certain suggestions were made as to drilling operations, which it was thought might be of assistance in a more efficient operation and greater extraction of the oil content of the various sands.

Fourth. It was also shown that the effect of shooting the oil sands had been detrimental in several ways.

In the preliminary field work elevations of oil wells drilled were taken as accurately as possible by stadia measurements, and were carried from a United States Government bench mark at the southeast corner of township 4 south and range 3 west. It is believed that the elevations on all wells are within an error of less than 3 feet of the exact altitude above sea level.

Various cross sections showing the condition of the wells were made east and west across the field, and correlation of the sands was given at the bottom of each plate. The occurrence of water

and a general description of the geology of the locality were given, and the relation of water to the occurrence of oil was shown in each case on the several cross sections.

It was found that the greatest source of water originated from two sources: First, "top water," or that water which comes in from above the producing sand, due to the unseated or leaky casing; second, "bottom water," or that water which was encountered in separate and distinct formations below the producing sand. The relation of wells to each other was pointed out and the possibilities of water migration from one to another were shown.

Due to the fact that the Government Printing Office at Washington was overworked at the time the report was completed, permission was secured to furnish copies to those operators and producers who were interested in the particular locality covered by the report. This has been done in most cases, and eventually copies will be put in the hands of all of those operators.

It is the thorough belief of those connected with this office that work of the character comprising the Healdton report is of vital importance to the successful continuation of the oil production in the Mid-Continent field, because of the fact that in the great majority of places the oil fields have passed the "flush production" stage and water is beginning to show in various wells. In order, then, to thoroughly understand and be able to combat the encroachment of water, it is necessary that work of this kind be carried on accurately and faithfully. This report, then, was nothing but an urgent study in order to interest oil operators in the value of work of this character.

#### FIELD WORK IN PICKETT PRAIRIE AND PUMPKIN CENTER.

It was believed that other work similar to that done in the Healdton field should be continued, and consequently in October and November, 1917, additional field surveys were made of the Pickett Prairie field in township 16 north, range 11 east, and in the Pumpkin Center field in township 18 north, range 11 east.

Due to the fact that present war conditions have taken away a number of men, it has been impossible to complete the work on those two localities at the present time. It is intended to finish this work at the earliest possible opportunity.

#### PROBATE.

The act of Congress approved May 27, 1908 (35 Stat., 312), provided for the appointment of "local representatives" of the Secretary of the Interior (United States probate attorneys), and gave them authority in probate matters affecting guardianships of enrolled minor allottees of the Five Civilized Tribes.

In a large number of cases many questions arise, such as the necessity for sale of lands, adequacy of rentals, present and prospective values, the character and value of improvements, the consideration offered, and the resulting benefit to be derived from various transactions affecting the estates of minors and adults under legal disability.

In the matter of the investment of funds of minor allottees in the purchase of real estate, there is also the necessity for careful investigation of title, value, location as to proximity to market, character and value of lands and improvements, consideration to be paid for the land, and the benefit as an investment to the estates whose funds are thus sought to be invested.

As to the investment of the funds of minor allottees by loans, secured by first real estate mortgages, there is also the necessity for the most careful investigation of the title, rate of interest, and value of the security offered for the loans.

Through the activities of the probate attorneys, not only has the liability to loss by unnecessary and improvident investment of the funds of minor allottees been largely overcome, but by their active cooperation with the courts and the attention they give to the interests intrusted to them for and in behalf of the minor allottees, minor's funds have been and are being conserved and invested to the best interests of these estates.

In the sales of inherited interests of full-blood allottees jurisdiction to approve deeds conveying their interest in lands of deceased full-blood Indians is conferred upon county courts of this State. The statutes governing the proceedings for the approval of deeds require that every jurisdictional fact be alleged and sustained by competent testimony. In this class of cases the probate attorneys render very valuable service. The death of the deceased whose lands are sought to be sold and the proof of heirship are the two primary facts to be distinctly proved. But other facts, such as the date and place of death and residence of the deceased at the time of the death, value of the interest to be conveyed, ascertained by disinterested witnesses, and that the purchase price is fair, reasonable, and adequate, must also be established.

Very often the applicant can not speak or understand the English language, has no personal knowledge of the land he seeks to convey or its value, and is not adequately informed as to his relationship to the deceased, relying upon family gossip and statements of the prospective purchaser and others interested in the promotion of the sale. Having had no experience in land deals and with but little, if any, business ability and needing ready money, the applicant for the approval of the deed easily and readily becomes a willing victim, unconscious of the loss he would suffer by the approval of his deed. The probate attorney under such circumstances protests against the sale and presents evidence in support of such protest. On the other hand, approval of the deed is recommended by the probate attorney when the facts and circumstances justify the sale.

The benefits to the minor members of the Five Civilized Tribes—educational, financial, and otherwise—resulting from the activities of the probate attorneys can not be overestimated.

#### LAW AND ORDER.

Realizing the demoralizing effect of the liquor traffic upon the Indian wards of the Government, Congress has enacted stringent legislation to prohibit the sale of intoxicating liquors to Indians, one of the most effective being the act of March 2, 1917, making auto-

mobiles or any other conveyances used in introducing or attempting to introduce liquors into the Indian country subject to seizure and forfeiture. Pursuant to this law Federal enforcement officers have confiscated 100 automobiles in addition to numerous other vehicles used as carriers of liquor.

Another effective congressional act was approved March 29, 1917, the so-called "bone-dry" legislation, making it unlawful to mail any kind of advertisements of intoxicating liquors to any person at any place in the State.

In former years one of the greatest problems confronting the enforcement officers in their efforts to keep liquor out of the Indian country was that, in what was known as Indian Territory before statehood, intrastate and interstate shipments or carriage of liquor were permitted. Under date of February 23, 1917, the Oklahoma Legislature passed the so-called "bone-dry" law. This makes it unlawful for any person in the State to possess liquor, the sale of which is prohibited, received directly or indirectly from a common or other carrier. This law applies to liquors intended for personal use, as well as otherwise, and to intrastate and interstate shipments or carriers. The only exception granted by this law is in favor of doctors or to hospitals, which may receive or possess pure grain alcohol for medicinal purposes. The passage of this act removed practically the only remaining impediment to the suppression of the liquor traffic.

Only in two counties was there any concerted action by the I. W. W. or similar organizations, and the few Indians who belonged to these organizations were not leaders, but were those who were unable to understand the English language and did not fully understand the purpose of the organizations. About 15 Indians were arrested in Hughes County, but the field clerk reports they were all discharged. In Seminole County only a few Indians were implicated and received punishment. As a whole the Indians fulfilled their obligations under the draft law without complaint, even though they did not understand its provisions as well as did their better-educated neighbors.

**RECENT DECISIONS RENDERED BY THE STATE AND FEDERAL COURTS  
AFFECTING CITIZENS OF THE FIVE CIVILIZED TRIBES AND THEIR  
ESTATES.**

**BENJAMIN HARRISON CASE.**

Benjamin Harrison, a duly enrolled citizen of the Creek Nation, died on November 10, 1900, when an infant, survived by his parents, two brothers, and a sister. An allotment was selected in the name of Benjamin Harrison on March 22, 1902, at a time when the Creek law of descent and distribution was in effect, and in accordance with said law, as construed by the Supreme Court of Oklahoma, this allotment passed absolutely to the mother of said Benjamin Harrison as sole heir, she being his "nearest relation." This decedent was, as were his parents, brothers, and sister, enrolled as a full-blood citizen of the Creek Nation. On January 7, 1911, Ellen Harrison, then Cooper, the mother and sole heir of said Benjamin Harrison, executed a conveyance purporting to convey to James A. Harris her interest in and to a part of the land allotted in the name of this



decendent, and this conveyance was submitted for departmental action, under the supposition that approval by the Secretary of the Interior was necessary in accordance with the opinion of the Attorney General of August 7, 1909, relating to conveyances of inherited land in the Five Civilized Tribes.

The question in this case was, did this land pass to decedent's mother as an inherited or an original allotment? The First Assistant Secretary of the Interior, in his opinion of July 25, 1912, held that no right or title ever vested in the said Benjamin Harrison to the land constituting the allotment selected in his name; that he died seized of no estate of inheritance therein; that the allotment, when made, passed by direct grant of the Creek Nation to his heirs; and that they took said land not as an inherited, but as an original allotment. It is further held in this opinion that as this land constituted an original allotment the laws governing the removal of restrictions and the sale of allotted lands must be applied rather than those laws affecting inherited allotments. This holding of the First Assistant Secretary of the Interior has been adhered to by the department and as a result there are numerous instances where supervision is retained over lands of this character and the leases thereon, even though it appears that the heirs have conveyed with the approval of the proper court, as provided by section 9 of the act of Congress of May 27, 1908 (35 Stat., 312).

In this connection, attention is called to a decision of the Supreme Court of the State of Oklahoma, in the case of *Moffett v. Conley* (163 Pac., 168), wherein the court had under consideration the question whether lands allotted in the name of a deceased Indian passed to the heirs by purchase or by inheritance. The court in this case said in effect that an allotment selected and made subsequent to the death of the citizen was made in satisfaction of the right which he, as one of the enrolled citizens and allottable units of the tribe, had in his lifetime; that the heirs took their title therefore not because of their enrollment as tribal citizens alone, but because they were his heirs, because they were related to him by consanguinity and succeeded to his rights at his death; that the lands allotted on his account were not intended as a bounty or gratuity to the heirs by the tribe; that the heirs succeeded to the same rights that the ancestor had at the time of his death, and that this right constituted an estate of inheritance and went by operation of law to his heirs. The doctrine set forth in this case, has been followed by the same court in later decisions.

The Supreme Court of the United States in the case of *Tally v. Burgess* (38 Supreme Court Reporter, 287), having under consideration, among other things, the question whether section 22 of the act of April 26, 1906 (34 Stat., 137), providing for the sale by heirs of inherited lands, is applicable to cases only where the selection of an allotment was made by the deceased citizen during his lifetime, said:

But in our view Congress in the passage of section 22 had in contemplation that Indians duly enrolled and entitled to share in the tribal property and lands might die before receiving the allotment to which he or she was entitled.

Provision was made in the several agreements entered into with representatives of each Nation of the Five Civilized Tribes to the effect that land might be allotted in the name of the deceased citizen

and should descend to the heirs of the one who would have been entitled, if living, and as to this the court said:

We think \* \* \* heirs who thus received lands are within the meaning and purpose of the statute (sec. 22, act of Apr. 26, 1906), as much so as they would have been, had the land been selected by the ancestor in his lifetime.

In view of the decisions above referred to, it appears that the doctrine set forth in the Benjamin Harrison case decision, as to the status or character of land selected subsequent to the death of the citizen entitled and the laws applicable thereto, is no longer tenable.

#### NEEDED LEGISLATION.

##### TRIBAL AFFAIRS.

1. For the survey of the boundary line between the State of Texas and the Choctaw and Chickasaw Nations along the Red River.
2. For the per capita distribution of tribal funds on deposit and as they accumulate.

##### INDIVIDUAL INDIANS.

1. An appropriation of \$200,000 for the administration of the affairs of the Five Civilized Tribes.
2. An appropriation of \$275,000 for the aid of common schools in eastern Oklahoma for the fiscal year 1920.
3. Provision for sanitarium, treating stations, physicians and nurses, conveniently located, for the treatment and prevention of diseases.
4. Repeal of the law which authorizes restricted lands to be leased for agricultural purposes without Federal supervision.
5. Repeal of the law which provides that restricted lands shall become unrestricted immediately upon the death of the allottee.
6. Repeal of the law which authorizes the execution of valid wills disposing of restricted property without departmental approval.
7. Extension of the Oklahoma law of descent and distribution to all tribal property of the Five Civilized tribes.
8. Provision for a Federal board of guardianship and administration of estates of minors and heirs to coordinate with the Federal Land Loan Board.

##### HEALTH.

For several years, in annual and special reports, this office has urged the necessity for provision to combat disease among the Indians of the Five Civilized Tribes and to teach hygiene and the principles of sanitation for the prevention of the spread of contagious and infectious diseases.

At the beginning of the fiscal year 1918 this office received an allotment of \$10,850 for "health drives" among the restricted Choctaws and Cherokees. In addition, \$1,487 was authorized from the fund "Relief of Distress and Prevention of Disease Among Indians," this amount being used in cases of destitution.

Immediate plans were perfected for a health drive among the Cherokee and Choctaw Tribes of Indians, and field matrons were appointed to work under the personal direction of Government physicians and special supervisors, with the cooperation of the field

employees of this office. Gratifying results were accomplished during the short time the small allotment of money would permit. The following summary gives an idea of the work accomplished during the period from July 2 to December 15, 1917, and indicates the need of continued and persistent work along this line:

#### CHOCTAW NATION.

##### BIRTHS AND DEATHS.

Number of babies 1 year and under reported.....	103
Deaths during the past year of babies 1 year and under.....	13

##### PREVALENCE OF DISEASE.

Families with past or present tubercular infection.....	165
Deaths reported during the year due to tuberculosis.....	31
Cases of sore eyes.....	136
Cases of trachoma.....	342
Cases of epilepsy.....	24
Cases of paralysis.....	9

##### ACTIVITIES OF FIELD MATRONS.

Total cases of illness treated and nursed by field matrons.....	325
Number of patients placed in Choctaw-Chickasaw Sanatorium.....	101
Cases sent to physicians, sanatoriums, or to health resorts.....	167
Number of children placed in school.....	93
Pamphlets on tuberculosis, care of babies, and other health pamphlets distributed among homes.....	2, 500

#### CHEROKEE NATION.

##### BIRTHS AND DEATHS.

Number of babies 1 year and under reported.....	264
Deaths during the past year of babies under 3 years.....	22
Deaths of adult Indians reported during the year.....	70

##### PREVALENCE OF DISEASE.

Cases of sore eyes.....	266
Allottees with tubercular infection.....	125
Allottees afflicted with other diseases.....	231

##### ACTIVITIES OF FIELD MATRONS.

Families visited.....	1, 082
Recommendation to office concerning improvements needed on farms.....	91
Reports concerning insanitary homes.....	131
Recommendations for the betterment of living conditions.....	86
Cases requiring immediate attention.....	47
Placed in sanatoriums.....	9
Placed in State School for the Blind.....	2
Placed in insane asylums.....	2

As will be noted by the above tabulated report, tuberculosis and kindred diseases present the greatest menace to the health and general welfare of the Indian tribes, due to the large number of families afflicted and ignorance of the people as to the cause and spread of disease.

Instances were reported where children were seen drinking from dippers used by adults in various stages of tuberculosis. Another menace to the health of the Indians of the Five Civilized Tribes has been their employment of Indian doctors instead of licensed practi-

tioners. Field matrons and field employees of this office have been successful in discouraging this practice to a large extent. One of the greatest problems which confronted the workers in the health drive was to gain the consent of the Indians afflicted with tuberculosis to leave home and enter a sanatorium for treatment.

The Choctaw-Chickasaw Sanatorium, which opened to patients on November 17, 1916, has been of material benefit in taking care of urgent cases among the members of these tribes, and there is urgent need of similar facilities for the Cherokees, Creeks, and Seminoles.

The health problem finally resolves itself into an educational campaign chiefly, for it is believed that ignorance and indifference are primarily responsible for the spread of contagious and infectious diseases among the Indians. What the field matrons and physicians were able to accomplish, with the aid of the field employees of this office, in the alleviation of particular diseases has been considerable. What they have done to arouse the Indian to his needs is more, but the greatest task remains—that of persistent and prolonged education in matters of hygiene and sanitation.

#### EDUCATION.

This office and its field employees actively cooperate with the supervisor of Indian schools in securing a full enrollment and regular attendance of Indian children in public and Indian schools. Where parents or pupils are remiss in these matters or are unable to take advantage of school facilities, it is often possible for this office and its field employees to render service in remedying such conditions. Payments of individual Indian funds are made or withheld as the case may require, and all proper means are employed to secure regular attendance in school of all children of school age.

It is necessary that a liberal appropriation for the aid of common schools of eastern Oklahoma be continued for several years. Many Indian children can not attend Indian schools, and as much of the land in a great many communities is nontaxed Indian allotments, without Federal aid, public schools could not be successfully maintained.

The accompanying report of Mr. A. S. Wyly, Supervisor of Indian Schools, shows in detail the organization, activities, and accomplishments of his office.

#### INDUSTRY.

The gratifying interest and activities of the restricted Indians of the Five Civilized Tribes aroused in the campaign of 1917 for increased food and feed production were equally manifested during 1918. Many acres of new land were put under cultivation. Practically every home planted a garden. Greater interest than ever before was taken in raising chickens, hogs, and cattle.

Under the advice and direction of our farmers and the representatives of the Department of Agriculture, county agents, both men and women, larger and more diversified crops were planted and better cultivated. Canning and drying vegetables were special features and accomplishments. Unfortunately the early drought in Oklahoma cut short and even destroyed many crops. However, the encouraging and important fact remains that the restricted Indians have become

interested in farming and kindred interests, and thousands of them have come to realize that they can farm and raise stock as successfully and profitably as their white neighbors.

### CONCLUSION.

Except in the Choctaw and Chickasaw Nations, practically all tribal property has been disposed of, leaving only miscellaneous details to be completed. Under the act of Congress approved February 8, 1918, the segregated coal and asphalt mineral deposits in the Choctaw and Chickasaw Nations are authorized to be sold by the Secretary of the Interior, and under the act approved May 25, 1918, equalization payments are authorized to be made to members entitled thereto of the Creek Tribe. Under these and prior acts there appears now sufficient legislation authorizing the Secretary of the Interior fully to dispose of all tribal affairs of the Choctaw, Chickasaw, Cherokee, Creek, and Seminole Nations. Under the necessary procedure it will take from 5 to 10 years, however, finally to dispose of all tribal property and to distribute the proceeds among the members of the tribes entitled to share therein.

Being of the life and spirit of the nation, the controlling thought and response of this office and the Indians, directly and indirectly under its supervision, have been inspired and directed in every possible way by the determination to render cheerfully and effectively positive, material service to the cause of our country and her allies in the world war.

Without doubt the Indians of the Five Civilized Tribes, particularly the restricted Indians, produced more food and feed by their own efforts and labor during the crop season of 1917 than ever before in their history. The same interest and efforts were manifested in the crop season of 1918. Unfortunately, however, the present drought in Oklahoma indicates slight production. The important and encouraging situation, however, is that the spirit and effort to do their best were manifested. During recent years allotments of the appropriation of the reimbursable fund were made to this office for the purchase of seeds for restricted Indians who were without funds and who desired to raise crops. In the fall of 1917 and the spring of 1918 I had an investigation made by my field men to ascertain the amount of the reimbursable fund that would be needed for the crop season of 1918. I was uniformly advised that the restricted Indians lived through the winter in better circumstances than formerly; that many had corn, vegetables, and other supplies stored away; and that fewer would need the reimbursable fund with which to purchase seeds.

It is impossible to report the amounts of purchases and donations of unrestricted Indians for war purposes; however, there have been purchased to July 1, 1918, for restricted Indians, having funds under the supervision of the department, \$6,923,670 worth of Liberty Bonds and War Savings Stamps, in addition to which many individual cash payments have been made for donations to the Red Cross. Employees of this office have purchased \$89,327 worth of Liberty Bonds and War Savings Stamps and contributed \$6,019.25 to the American Red Cross and local Young Men's Christian Association, not including liberal contributions made locally by our field men to these causes.

There were constructed during the year 127 houses at a cost of \$134,466.67, 51 barns at \$22,912.95, and 96 wells at \$8,093.94. There were purchased 472 horses and mules at a cost of \$63,739.78, 494 cattle at \$35,766.84, 509 hogs at \$13,088.66, and 228 wagons at \$35,092.15. Miscellaneous farm implements were purchased at a total cost of \$25,544.10. There was disbursed on account of per capita payments, improvements, and individual cash payments to Indians, salaries and expenses, a total of \$12,455,146.08. There was received of individual and tribal funds and congressional appropriations a total of \$16,175,520.73, showing a grand total of all moneys handled by this office during the fiscal year of \$28,630,666.81.

In order to modernize the accounting system of this office and to expedite the work, upon my recommendation, two representatives of the Bureau of Efficiency spent several months instituting a new system. Already many advantages are apparent and unquestionably much time and labor will be saved both in the work of the department and this office. Under the old system the books of this office were closed for accounting and reporting purposes practically one-fourth of the entire year. Under the new system it is unnecessary to close the books during the preparation of the reports to the department and such reports can be rendered within a few days after the close of each quarter of the fiscal year. This one feature is worth many times more than the time and work necessary to change the system. In addition to this important improvement there are many other time and labor saving features of the new system.

The fiscal year 1918 was replete with extraordinary developments and problems, caused principally by war conditions. It is estimated that more than 4,000 Indians of the Five Civilized Tribes have entered the military service. Their home and business relations, of course, had to be readjusted as quickly as possible, and naturally such of their affairs as are under the supervision of this office came up for immediate attention, often requiring unusual and special action, thus disrupting and delaying the ordinary routine. Sixty-three regular employees resigned, many of whom occupied the most important positions in the office. Thirty-eight entered the military service and the others largely went into commercial employment because of more attractive salaries. Notwithstanding these conditions, substantial progress was made toward disposing of tribal affairs and securing larger response and cooperation of individual restricted Indians in matters of education, industry, and conservation of their estates.

I renew my recommendation for an appropriation of \$200,000 for the administration of the affairs of the Five Civilized Tribes. Considering the volume of necessary work, the increased cost of labor, materials, and expenses, \$185,000 is inadequate to support the character and scope of administration needed. Justifications in detail will be submitted at the proper time.

Respectfully,

GABE E. PARKER,

*Superintendent for the Five Civilized Tribes.*

THE COMMISSIONER OF INDIAN AFFAIRS.

## **ANNUAL REPORT OF THE SUPERVISOR OF INDIAN SCHOOLS, FIVE CIVILIZED TRIBES.**

There is submitted herewith my annual report as supervisor of the schools of the Five Civilized Tribes for the fiscal year ended June 30, 1918.

### **INSPECTION OF BOARDING SCHOOLS.**

Ten boarding schools having a capacity of about 100 pupils each were maintained in this jurisdiction. During the year a school for Chickasaw girls was opened at Ardmore, the Hargrove College property having been acquired for this purpose soon after the original Bloomfield School buildings were destroyed by fire in January, 1914. The schools were visited at regular intervals and two reports of inspection were made.

The boarding schools, like all other institutions, have felt the effects of the war, and one result noticeable is a falling off in the average attendance, this being especially true of the schools for boys. The enrollment was as large and in some cases larger than heretofore but the general unrest in the country extended to the schools and there were more desertions than usual; some of the older boys were drafted and others volunteered for military service, and pursuant to the nation-wide campaign and demand for increased production of food and feed crops, and on account of the shortage of labor in nearly all localities, many of the boys were withdrawn to work on the farms.

### **BOARDING-SCHOOL EMPLOYEES.**

Just before the close of the year Mr. William F. Aveb, who for six years was superintendent of Tuskahoma Academy, resigned to engage in private business, and Mr. William D. Dilbeck, principal of the Riverside High School, Fort Worth, Tex., was appointed to the vacancy and took charge on June 8. There were no other changes in superintendents but there have been many changes in subordinate positions. At one of the boys' schools with 14 authorized positions, 11 changes in employees were reported.

The employees generally are competent and superintendents have endeavored to secure the services of efficient people but it is becoming more and more difficult to retain them for the reason that better salaries are offered in other lines of work. The slight increase in salaries provided for by act of Congress was of some benefit but was not commensurate with the increased cost of living, and some of the experienced employees left the service for more attractive salaries. With frequent changes in employees it is not possible to accomplish the best results and to maintain a high standard of school work.

The academic positions and some of the industrial teachers' places are authorized for only nine months in the year, and if all employees were paid annual salaries, as is the practice in the general service, it is believed there would be fewer resignations and less consequent disorganization of the work.

## HEALTH.

Those things that make for better health conditions have had the thoughtful consideration of superintendents, physicians, nurses, and others charged with responsibility. All pupils are given a careful physical examination when they enroll and at frequent times during the year, and those having tuberculosis are urged to enter Government hospitals for treatment. At the Choctaw and Chickasaw schools it is not a difficult matter in most cases to have the tubercular children go to a hospital, as a sanatorium is maintained in the Choctaw Nation, but pupils at the other schools are compelled to go to institutions away from their homes and outside the State, and many of the parents seriously object to this.

Progress has been made in the treatment of trachoma and operative cases have had proper attention, but during the summer vacation months much that has been done toward eradicating the disease is lost by the children neglecting to observe and practice preventive measures in their homes.

Epidemics of mumps, measles, and la grippe were reported at all the schools. At two of them a few cases of smallpox in a mild form developed, and at Eufaula there were three cases of diphtheria but by prompt action the further spread of these diseases was prevented.

The schools have playground apparatus; military drills, setting-up exercises, group games, and other kind of athletics have all been conducive to better health. Notwithstanding the greatly increased cost of all supplies, a sufficient quantity of good wholesome food has been provided.

## ACADEMIC AND INDUSTRIAL TRAINING.

The academic course is limited to six grades at Cherokee, Euchee, Nuyaka, and Mekusukey, but at the other schools the work covers eight grades. The new course of study is followed as closely as possible considering the number of academic and industrial subjects required and the employees engaged. At the close of the year pupils in the third year primary, prevocational, and vocational grades took the final examinations, and notwithstanding the irregular attendance at some of the schools and the large number of changes of employees at others, the percentage of those making passing grades ranged from 65 to 97.

Proper industrial instruction and training have continued to receive serious attention, and special consideration has been given to cooking, sewing, laundering, home training, and home making generally at the girls' schools. Many of the boys have allotments of land, and for this reason emphasis has been put on farming, stock raising, farm carpentry, and kindred subjects. While the industrial equipment is not wholly adequate it is sufficient to enable a substantial compliance with the requirements of the course of study. In every way the necessity for and dignity of labor has been upheld and the children usually have responded to the demands for work in the different industrial departments with good will and enthusiasm.

The way in which pupils and employees of the Five Tribes schools have answered the call of duty in connection with the war and its



different activities shows a fine spirit of loyalty and patriotism. The rules of the food administrator have been observed so far as possible, much of the waste has been eliminated, and there has been a substantial saving in flour, sugar, meat, and fats. More than \$150,000 in Liberty Bonds were bought and \$13,400 was invested in Thrift and War Savings Stamps. The contributions to the Red Cross, Young Men's Christian Association, and other similar organizations amounted to \$2,453.80, and the girls of the domestic art departments have made a large number of garments for the soldiers, one of the schools finishing more than 350 sweaters, helmets, and sleeping garments. The spirit of unselfish service and the habits of thrift and saving thus impressed must ultimately be of incalculable value to the Indian child.

#### MATERIAL IMPROVEMENTS.

The school plants have been kept in as good repair as available funds would permit, and at Eufaula a cottage large enough to accommodate most of the employees was completed. One of the small cottages formerly used for employees' quarters was converted into a hospital, which was a much-needed improvement, and each of the other schools should have a small modern building for similar purposes.

At Euchee and Tuskahoma modern dairy barns were built, and at Nuyaka a two-story frame shop building with storage and industrial class rooms was completed. The buildings at Bloomfield were remodeled and made modern so far as possible, but if this school is to be maintained within the per capita cost limit and a good standard of school work done a dormitory building, a domestic science cottage, and other necessary improvements should be made.

Heating plants were installed in the girls' dormitory and in the school building at Cherokee, and material was purchased for building a lavatory. Other needed improvements at this school have been recommended in inspection reports and it is hoped that these will be made this year. The condition of the heating plant at Wheelock Academy has also been the subject of correspondence with the office and this should by all means be put in good condition before the winter months.

#### PUBLIC SCHOOLS.

No day schools are maintained by the Government in this jurisdiction for the education of Indian children exclusively, the public schools in the 2,372 districts of the 40 counties being open to them. There were 379,059 children of all classes between the ages of 6 and 21 years enumerated in these districts, and of this number 25,612 are Indians. There were 18,869 Indian children enrolled in the district schools and 5,026 of them are restricted, having one-half or more Indian blood.

The full-blood Indian child who does not speak or understand the English language, and who is by nature timid and reticent, enters the public school seriously handicapped. In the average rural school with but one teacher and with 20 to 30 or more pupils classified by grades up to the eighth, it is not possible for the few nonspeaking English, full-blood children to receive the personal time and attention

of the teacher that their condition demands. The result is they frequently become discouraged and quit school or their attendance is so irregular that little permanent good is accomplished. It is this class of children that should be encouraged in every way to enroll at the tribal and other Indian boarding schools, where the course of study is well adapted to their needs and where they may have the benefit of practical industrial training.

The reports of attendance of Indian children, the correspondence and conferences with county superintendents and local district school officials, and the personal visits made by the day school superintendent to more than 100 of the schools located in communities where many restricted Indians live, have enabled us to keep in touch with conditions, and the information thus received discloses that the regularity of attendance of both white and Indian children is not nearly so good as it ought to be. The State has a compulsory attendance law which applies to Indian and white children alike between the ages of 8 and 16 years, but it is not generally enforced.

In accordance with the regulations for the distribution of the appropriation of \$275,000 for aid of common schools in the Five Tribes and the Quapaw Agency, payments were made as follows:

Tuition was paid to districts at the rate of 10 cents per day per pupil for the actual attendance of all Indian children of school age, but the incorporated town districts received tuition only for the attendance of such children who live in the district but outside the corporate limits. Tuition payments amounting to \$108,449 were made to 1,330 districts.

All districts other than incorporated towns and cities, where a tax of 5 or more mills was levied, received one-half of the amounts required in excess of a 5-mill levy to maintain an eight months term, provided such districts increased their levies sufficiently to pay the balance of the required amounts. Under this provision \$126,469.52 was disbursed.

A final payment of 12 cents per capita, based upon the State enumeration of all children of school age, was made to districts other than incorporated towns and cities, amounting to \$26,659.56. The total amount disbursed was \$261,614.08.

The tables herewith show how the distribution of the congressional appropriation was made, the number of Five Tribe pupils enrolled at the nonreservation, Seneca, and Cheyenne-Arapahoe Schools, and statistics relative to the contract and tribal boarding schools. Attention is called to the fact that in the nonreservation, Seneca, and Cheyenne-Arapahoe Schools there were enrolled 837 children, at the contract schools 585, and at the tribal boarding schools 1,347 pupils, a total of 2,739, of whom 1,470, are full bloods, 686 other restricted, making a total of 2,156 in the restricted Indian class. With 18,869 Indian children enrolled in the public schools the total enrollment in all the schools amounted to 21,608 of the 25,612 Indian children enumerated.

Respectfully submitted.

A. S. WYLY, *Supervisor.*

THE COMMISSIONER OF INDIAN AFFAIRS.

*Enrollment of students from Five Civilized Tribes in Carlisle Indian School, Chilocco Training School, Haskell Institute, Seneca Indian School, and Cheyenne and Arapahoe School.*

	Chero- kee.	Chicka- saw.	Choctaw.	Creek.	Seminole.	Total.
<b>Carlisle Indian School:</b>						
Full blood.....	4	7	32	26	.....	69
Other restricted.....	7	5	10	4	1	27
Unrestricted.....	9	1	11	4	.....	25
	20	13	53	34	1	121
<b>Chilocco Training School:</b>						
Full blood.....	109	13	30	26	9	189
Other restricted.....	52	18	21	14	.....	105
Unrestricted.....	3	.....	.....	3	.....	6
	164	31	51	45	9	300
<b>Haskell Institute:</b>						
Full blood.....	35	7	35	35	5	117
Other restricted.....	68	7	27	17	3	122
Unrestricted.....	.....	.....	6	1	.....	7
	103	14	68	53	8	246
<b>Seneca Indian School:</b>						
Full blood.....	43	.....	.....	.....	.....	43
Other restricted.....	23	.....	.....	.....	.....	23
Unrestricted.....	.....	.....	.....	.....	.....	.....
	66	.....	.....	.....	.....	66
<b>Cheyenne and Arapahoe School:</b>						
Full blood.....	45	16	1	4	.....	66
Other restricted.....	21	3	.....	.....	.....	24
Unrestricted.....	4	.....	.....	.....	.....	4
	70	19	1	4	.....	94
<b>Total.....</b>	423	77	173	136	18	827

Total number of full-blood Indian pupils in above schools..... 484

Total number of other restricted pupils in above schools..... 301

Total number of unrestricted pupils in above schools..... 42

827

*Statistics of contract schools.<sup>1</sup>*

	Full blood.	Other restricted.	Unrestricted.	Total.	Average attendance.	Amount paid.
Oklahoma Presbyterian College for Girls, Durant:						
Choctaw.....		5	19	24	19.7	\$2,033.12
Chickasaw.....		2	20	22	16.3	1,702.80
Murray State School of Agriculture, Tishomingo:						
Choctaw.....	3		26	29	23.4	2,555.96
Chickasaw.....	5	7	20	32	25.4	2,714.70
Old Goodland Indian Industrial School, Hugo:						
Choctaw.....	77	7	3	87	71.8	8,795.14
El Meta Bond College, Minco:						
Choctaw.....			13	13	9.5	1,054.59
Chickasaw.....	1	4	22	27	13.8	2,059.35
St. Agnes Mission, Antlers:						
Choctaw.....	27	13	15	55	45.9	4,860.09
St. Agnes Academy, Ardmore:						
Choctaw.....	32	12	52	96	67.8	7,305.58
Chickasaw.....	24	21	37	82	62.1	6,974.55
St. Josephs School, Chickasha:						
Choctaw.....			15	15	14.9	1,604.76
Chickasaw.....			6	6	5.2	546.40
St. Elizabeths School, Purcell:						
Choctaw.....	6	3	33	42	29.9	3,224.76
Chickasaw.....		12	23	35	30.2	3,240.00
Choctaw.....	145	40	176	361		31,433.91
Chickasaw.....	30	46	128	204		17,238.40
Total.....	175	86	304	565		48,672.31

<sup>1</sup> All schools are in Oklahoma.*Boarding schools.<sup>1</sup>*

School.	Post-office address.	Telegraphic address.	Telephone connection.	Railroad station.
Armstrong Male Academy.	Academy...	Bokchito...	Rural line to Bokchito.	Bokchito; 4 miles to school by private conveyance.
Jones Male Academy...	Hartshorne.	Hartshorne.	Rural line to Hartshorne.	Hartshorne; 4 miles to school by private conveyance.
Wheelock Female Academy.	Millerton....	Millerton....	Private line to Millerton.	Millerton; 1½ miles to school by private conveyance.
Tuskahoma Female Academy.	Tuskahoma.	Tuskahoma.	Private line to Tuskahoma.	Tuskahoma; 4 miles to school by private conveyance.
Bloomfield Seminary...	Ardmore....	Ardmore....	With regular telephone line.	Ardmore; 2 miles from depot.
Cherokee Orphan Training School.	Park Hill...	Tahlequah.	Government line to Tahlequah.	Park Hill; 3 miles to school by private conveyance.
Mekuskey Academy...	Seminole....	Seminole....	Government line to Seminole.	Seminole; 5 miles to school by private conveyance.
Eufaula Boarding School.	Eufaula.....	Eufaula.....	With regular telephone line.	Eufaula; 1 mile from depot.
Euchee Boarding School.	Sapulpa.....	Sapulpa.....	do.....	Sapulpa; 1 mile from depot.
Nuyaka Boarding School.	Nuyaka.....	Oklmulgee...	Rural line to Okmulgee.	Beggs; 12 miles to school by private conveyance.

<sup>1</sup> All schools are in Oklahoma.

*Statistics of tribal boarding schools.*

	Total enrollment	Number full-blood pupils.	Number other restricted pupils.	Number unrestricted pupils.	Number full-blood and other restricted pupils completing course of study.	Total number completing course of study.	Average attendance.
Cherokee Nation:							
Cherokee Orphan Training School.....	177	127	50	.....	5	5	129
Chickasaw Nation:							
Bloomfield Seminary.....	116	43	20	53	.....	.....	66
Collins Institute <sup>1</sup> .....	.....	.....	.....	.....	.....	.....	.....
Choctaw Nation:							
Armstrong Male Orphan Academy.....	132	94	10	28	.....	.....	81
Jones Male Academy.....	123	63	37	23	4	6	86
Tuskahoma Female Academy.....	124	34	32	58	.....	4	99
Wheelock Female Orphan Academy.....	118	65	17	36	.....	1	88
Creek Nation:							
Euchee Boarding School.....	130	97	24	9	8	11	107
Eufaula Boarding School.....	136	86	36	14	.....	.....	107
Nuyaka Boarding School.....	126	97	23	6	6	6	90
Seminole Nation:							
Mekusukey Academy.....	165	105	50	10	4	5	97
Total.....	1,347	811	299	237	27	38	950

	Permanent improvements and repairs to buildings.	Cost of maintenance.	Total annual expenditure.	Amount collected for board and music tuition.	Net total expenditure.
Cherokee Nation:					
Cherokee Orphan Training School.....	\$14,576.52	\$22,522.31	\$37,098.83	\$1,277.91	\$35,820.92
Chickasaw Nation:					
Bloomfield Seminary.....	11,081.36	17,824.67	28,906.03	895.27	28,010.78
Collins Institute <sup>1</sup> .....	.....	2,911.34	2,911.34	.....	2,911.34
Choctaw Nation:					
Armstrong Male Orphan Academy.....	1,099.47	24,784.39	25,883.86	1,090.47	24,793.39
Jones Male Academy.....	1,392.79	19,150.58	20,543.37	694.81	19,848.56
Tuskahoma Female Academy.....	2,875.88	24,427.26	27,403.24	1,653.13	25,750.01
Wheelock Female Orphan Academy.....	2,118.00	21,090.47	23,208.47	1,260.09	21,948.38
Creek Nation:					
Euchee Boarding School.....	1,872.92	21,715.64	23,588.56	1,262.46	22,326.10
Eufaula Boarding School.....	1,486.65	19,781.22	21,267.87	1,618.99	19,648.88
Nuyaka Boarding School.....	5,665.66	23,432.76	29,098.42	1,245.87	27,852.55
Seminole Nation:					
Mekusukey Academy.....	4,540.60	21,820.68	26,361.28	1,534.46	24,826.82
Total.....	48,809.85	219,461.32	266,271.17	12,533.46	253,737.71

<sup>1</sup> School discontinued Oct. 15, 1917.

Scholastic enumeration and distribution of \$275,000 appropriation in aid of common schools among the Five Civilized Tribes, and Quapaw Agency, Okla., fiscal year ended June 30, 1918.

No.	County.	Total enumeration school children, all districts.					Number Indian children of restricted class.	Ineligible Indian children.	Indian children in districts receiving no payments.	Number restricted class in public schools.	Number unrestricted class in public schools.	Number districts receiving payments.
		Number of districts.	Whites.	Indians.	Negroes.	Total.						
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>CHEROKEE NATION.</b>												
1	Adair.....	40	3,173	1,723	25	4,921	730	5		635	750	40
2	Cherokee.....	79	5,199	1,771	327	7,297	532	4		276	1,020	79
3	Craig.....	74	4,381	1,504	340	6,225	141	1		137	1,031	74
4	Delaware.....	72	3,499	1,454	6	4,959	437			351	824	72
5	Mayes.....	65	4,177	1,355	239	5,751	213			156	891	65
6	Nowata.....	51	3,752	838	573	5,163	70			45	593	51
7	Ottawa.....	49	11,229	981		12,210	425		80	333	334	47
8	Rogers.....	40	5,920	1,221	166	7,307	81			63	877	40
9	Sequoyah.....	71	7,272	1,513	942	9,727	330	2	175	282	849	70
10	Washington.....	26	6,388	456	195	7,039	120	1		80	242	26
<b>CHICKASAW NATION.</b>												
11	Carter.....	67	12,257	218	1,847	14,322	95		38	60	102	63
12	Garvin.....	72	10,017	417	695	11,129	56		78	24	273	69
13	Grady.....	63	8,372	404	701	9,477	57		34	50	251	62
14	Jefferson.....	46	5,228	68	81	5,377	12	1	26	8	47	42
15	Johnston.....	58	6,731	389	232	7,352	130		12	87	171	56
16	Love.....	34	4,608	115	430	5,153	27			14	67	33
17	Marshall.....	43	5,343	353	129	5,830	125			90	175	42
18	Murray.....	30	4,000	234	111	4,345	68		5	40	122	29
19	McClain.....	50	6,258	235	263	6,754	14		15	10	162	49
20	Pontotoc.....	65	10,314	300	382	10,996	145			84	170	65
21	Stephens.....	46	6,680	210	36	6,926	23		21	11	146	44
<b>CHOCTAW NATION.</b>												
22	Atoka.....	57	7,002	269	392	7,663	138		44	99	125	56
23	Bryan.....	74	12,656	890	583	14,119	142	2	12	100	565	72
24	Choctaw.....	47	8,450	466	1,680	10,616	130			123	220	46
25	Coal.....	47	5,546	277	225	6,048	66		16	42	164	43
26	Haskell.....	56	6,904	361	139	7,404	161		16	135	157	54
27	Latimer.....	37	4,481	137	175	4,793	125	1	3	52	51	35
28	Le Flore.....	107	13,344	725	650	14,719	198		41	136	351	102
29	McCurtain.....	87	9,350	669	2,265	12,314	462			250	251	86
30	Pittsburg.....	109	16,160	839	1,116	18,115	247		14	159	477	104
31	Pushmataha.....	60	5,299	395	132	5,826	152	1		110	158	60
<b>CREEK NATION.</b>												
32	Creek.....	76	15,500	121	2,043	17,664	81		20	38	56	70
33	Hughes.....	70	8,682	391	738	9,811	220		26	150	133	68
34	Muskogee.....	83	13,287	1,283	5,303	19,873	193		160	131	785	78
35	McIntosh.....	67	6,706	1,020	2,501	10,227	318		18	216	434	64
36	Okfuskee.....	50	5,449	312	3,321	9,082	175	2	7	119	135	47
37	Okmulgee.....	46	11,233	259	3,311	14,803	155		57	77	85	41
38	Tulsa.....	39	19,724	786	1,868	22,378	145		49	104	311	35
39	Wagoner.....	65	3,955	341	2,479	6,785	90			60	196	61
<b>SEMINOLE NATION.</b>												
40	Seminole.....	54	6,439	287	1,633	8,559	260		31	96	97	52
	<b>Total.....</b>	<b>2,372</b>	<b>314,973</b>	<b>25,612</b>	<b>38,474</b>	<b>379,059</b>	<b>7,289</b>	<b>20</b>	<b>998</b>	<b>5,096</b>	<b>13,843</b>	<b>2,292</b>

*Scholastic enumeration and distribution of \$275,000 appropriation in aid of common schools among the Five Civilized Tribes, and Quapaw Agency, Okla., fiscal year ended June 30, 1918—Continued.*

No.	County.	Districts assisted by Government—rural districts.								
		Scholastic enumeration.					Payments.			
		Number of districts.	Indians.	Whites.	Negroes.	Total.	Tuition.	Minority.	Additional.	Total.
1	2	14	15	16	17	18	19	20	21	22
<b>CHEROKEE NATION.</b>										
1	Adair.....	37	1,420	2,120	25	3,565	\$5,744.70	.....	\$1,423.54	\$7,168.24
2	Cherokee.....	77	1,507	4,595	285	6,386	5,802.10	.....	3,303.20	9,105.30
3	Craig.....	70	1,181	2,658	213	4,052	5,724.10	.....	901.19	7,625.29
4	Delaware.....	68	1,292	2,918	6	4,216	6,271.70	.....	4,623.11	10,894.81
5	Mayes.....	60	947	3,002	239	4,188	5,401.80	.....	1,465.11	6,866.91
6	Nowata.....	46	646	1,813	359	2,818	3,277.50	.....	338.16	3,615.66
7	Ottawa.....	43	723	7,103	.....	7,826	2,956.50	.....	6,406.85	9,363.35
8	Rogers.....	33	527	2,192	57	2,776	3,889.10	.....	577.99	4,467.09
9	Sequoyah.....	64	964	5,418	671	7,053	4,378.80	\$79.56	6,330.99	10,789.35
10	Washington.....	20	198	1,400	28	1,626	2,096.10	.....	327.52	2,423.62
<b>CHICKASAW NATION.</b>										
11	Carter.....	62	165	5,891	1,117	7,173	884.90	.....	2,849.55	3,734.45
12	Garvin.....	66	331	6,807	420	7,458	810.75	219.83	8,319.26	9,349.83
13	Gary.....	53	246	4,466	277	4,979	1,594.80	.....	4,996.81	6,591.61
14	Jefferson.....	40	35	2,932	12	2,979	148.90	.....	2,302.93	2,451.83
15	Johnston.....	52	269	4,392	143	4,804	697.50	123.54	5,063.28	5,894.32
16	Love.....	30	94	3,152	355	3,601	526.90	78.94	5,356.57	5,962.41
17	Marshall.....	39	21	4,068	29	4,147	835.80	.....	2,877.23	3,713.03
18	Murray.....	25	143	2,070	41	2,254	600.10	.....	2,819.59	3,419.69
19	McClain.....	46	194	4,636	148	4,978	902.20	47.60	2,531.90	3,481.70
20	Pontotoc.....	60	178	6,606	237	7,021	952.30	206.75	7,689.99	8,648.04
21	Stephens.....	43	147	4,097	2	4,246	651.30	.....	7,062.41	7,733.71
<b>CHOCTAW NATION.</b>										
22	Atoka.....	53	190	5,737	240	6,167	884.24	.....	3,246.16	4,130.40
23	Bryan.....	64	506	7,966	543	9,105	2,227.20	186.01	3,461.57	5,874.78
24	Choctaw.....	41	380	4,773	1,130	6,283	1,227.70	741.74	6,231.60	8,201.04
25	Coal.....	43	261	4,022	96	4,379	1,162.60	101.86	3,380.02	4,644.48
26	Haskell.....	51	229	4,665	67	4,961	1,431.80	52.11	7,577.02	9,066.93
27	Latimer.....	35	134	3,420	127	3,681	317.50	.....	1,854.60	2,172.10
28	Le Flore.....	97	519	9,675	518	10,712	1,665.30	.....	10,588.37	12,253.67
29	McCurtain.....	81	585	6,855	1,960	9,400	1,481.80	334.06	7,571.42	9,357.28
30	Pittsburg.....	97	664	7,719	386	8,789	2,403.80	142.93	6,140.83	8,687.56
31	Pushmataha.....	58	326	4,622	104	4,962	806.10	58.80	4,875.13	5,742.03
<b>CREEK NATION.</b>										
32	Creek.....	67	84	5,557	1,134	6,775	494.40	.....	813.00	1,307.40
33	Hughes.....	64	310	6,422	527	7,259	1,082.20	183.46	4,041.18	5,311.84
34	Muskogee.....	71	799	4,062	1,829	6,680	3,012.60	43.31	1,096.53	4,152.44
35	McIntosh.....	60	766	4,538	1,465	6,769	1,694.80	21.95	1,363.28	3,080.03
36	Okfuskee.....	45	239	3,939	2,332	6,510	1,130.80	302.60	2,034.12	4,367.52
37	Okmulgee.....	41	202	2,962	2,577	5,831	758.70	71.66	1,029.65	1,869.01
38	Tulsa.....	31	570	3,221	373	4,164	1,222.60	.....	499.68	1,722.28
39	Wagoner.....	59	215	2,742	1,793	4,750	1,431.90	58.39	1,059.64	2,549.93
<b>SEMINOLE NATION.</b>										
40	Seminole.....	50	222	5,228	1,671	7,121	363.70	359.89	4,395.03	5,118.62
<b>Total.....</b>		2,147	18,439	180,360	23,635	222,514	79,948.50	3,418.99	149,746.09	233,114.67

*Scholastic enumeration and distribution of \$275,000 appropriation in aid of common schools among the Five Civilized Tribes, and Quapaw Agency, Okla., fiscal year ended June 30, 1918—Continued.*

No.	County.	Districts assisted by Government—incorporated town districts.					
		Scholastic enumeration.				Payments.	
		Number of districts.	Indians.	Whites.	Ne-groes.	Total.	Tuition. Total, all districts.
1	2	23	24	25	26	27	28
<b>CHEROKEE NATION.</b>							
1	Adair.....	3	303	1,083	.....	1,356	\$1,797.60 \$8,965.84
2	Cherokee.....	2	264	605	42	911	188.70 9,294.00
3	Craig.....	4	323	1,723	127	2,173	1,512.90 9,138.19
4	Delaware.....	4	162	581	.....	743	906.50 11,800.31
5	Mayes.....	5	388	1,175	.....	1,563	2,127.80 8,994.71
6	Nowata.....	5	192	1,939	214	2,345	747.10 43,627.76
7	Ottawa.....	4	180	2,505	.....	2,685	970.00 10,333.35
8	Rogers.....	7	694	3,728	109	4,531	3,334.60 7,801.69
9	Sequoyah.....	6	374	1,234	221	1,829	1,662.60 12,451.96
10	Washington.....	6	258	4,988	167	5,413	1,677.50 4,001.12
<b>CHICKASAW NATION.</b>							
11	Carter.....	1	15	926	.....	941	92.00 3,826.45
12	Garvin.....	3	108	1,492	172	1,772	779.15 10,128.95
13	Grady.....	4	124	3,452	424	4,030	582.20 7,173.81
14	Jefferson.....	2	7	298	.....	305	40.30 2,492.13
15	Johnston.....	4	108	1,638	89	1,835	568.00 6,453.32
16	Love.....	3	21	1,151	75	1,247	27.50 5,989.91
17	Marshall.....	3	148	1,244	101	1,493	825.40 4,536.43
18	Murray.....	4	86	1,801	70	1,957	438.60 3,935.29
19	McClain.....	2	33	1,307	106	1,446	147.80 3,629.50
20	Pontotoc.....	5	122	3,708	145	3,975	616.60 9,464.64
21	Stephens.....	1	42	1,099	34	1,175	59.90 7,793.61
<b>CHOCTAW NATION.</b>							
22	Atoka.....	3	35	672	48	755	161.46 4,291.86
23	Bryan.....	8	272	4,125	40	4,437	1,662.60 7,537.38
24	Choctaw.....	5	106	3,677	550	4,333	651.10 8,852.14
25	Coal.....	.....	.....	.....	.....	.....	..... 4,644.48
26	Haskell.....	3	95	960	.....	1,055	601.60 9,662.53
27	Latimer.....	.....	.....	.....	.....	.....	..... 2,172.19
28	Le Flore.....	5	177	2,014	116	2,307	422.00 12,675.67
29	McCurtain.....	5	105	1,531	219	1,855	508.50 9,896.78
30	Pittsburg.....	7	141	5,492	592	6,225	1,393.30 10,080.86
31	Pushmataha.....	2	69	777	28	874	316.10 6,058.18
<b>CREEK NATION.</b>							
32	Creek.....	3	17	485	112	614	11.80 1,319.20
33	Hughes.....	4	55	1,197	76	1,328	235.90 5,547.74
34	Muskogee.....	7	324	1,809	505	2,638	1,423.50 5,575.94
35	McIntosh.....	4	236	2,036	551	2,823	880.20 3,960.29
36	Okfuskee.....	2	39	462	188	689	126.40 4,493.92
37	Okmulgee.....	.....	.....	.....	.....	.....	..... 1,860.01
38	Tulsa.....	4	167	13,232	1,806	14,705	596.30 2,318.58
39	Wagoner.....	2	126	1,017	187	1,330	319.90 2,899.83
<b>SEMINOLE NATION.</b>							
40	Seminole.....	2	34	601	147	782	140.00 5,258.62
<b>Total.....</b>		145	5,950	77,764	6,761	90,475	28,499.41 261,614.08



# ANNUAL REPORT OF MINING TRUSTEES FOR CHOCTAW AND CHICKASAW NATIONS.

MOALESTER, OKLA., August 29, 1918.

HON. GABE E. PARKER,

*Superintendent for the Five Civilized Tribes, Muskogee, Okla.*

SIR: We have the honor to respectfully submit our report for the fiscal year ended June 30, 1918.

The coal output this year, compared with that of the year ended June 30, 1917, shows an increase of 554,568.03 tons.

The output of asphalt for this year, compared with that of the year ended June 30, 1917, shows a decrease of 2,432.08 tons.

## COAL AND ASPHALT LEASES.

The following statement gives the names of individuals and companies who have approved leases covering coal and asphalt lands in the Choctaw and Chickasaw Nations, Okla.:

### Coal leases.

Name of lessee.	Mines at or near—	Principal office.
Bache-Denman Coal Co.....	Red Oak, Okla.....	Fort Smith, Ark.
Bokoshe Smokeless Coal Co.....	Bokoshe, Okla.....	Do.
Cameron Coal & Mercantile Co.....	Williams, Okla.....	Do.
Carbon Coal Co.....	Carbon, Okla.....	Carbon, Okla.
Central Coal & Lumber Co. <sup>1</sup> .....	Carbon and Calhoun, Okla.....	Kansas City, Mo., Keith & Perry Building.
Craig Coal & Mining Co.....	Craig, Okla.....	North McAlester, Okla.
Coalgate Co.....	Coalgate, Okla.....	Coalgate, Okla.
Cutts, Geo. T., trustee.....	do.....	Parsons, Kans.
Degnan-McConnell Coal Co.....	Wilburton, Okla.....	Wilburton, Okla.
Degnan-McConnell Coal & Coke Co.....	do.....	Do.
Denison Coal Co.....	Coalgate, Okla.....	Denison, Tex.
Dow Coal Co.....	Savanna, Okla.....	McAlester, Okla.
Eastern Coal & Mining Co.....	Wilburton, Okla.....	Wilburton, Okla.
Eclipse Coal & Mining Co.....	Adamson, Okla.....	Do.
Folsom-Morris Coal & Mining Co.....	Lehigh and Midway Okla.....	Lehigh, Okla.
Great Western Coal & Coke Co. (T. W. Wheatley, receiver).....	Wilburton and Baker, Okla.....	McAlester, Okla.
Gaines Creek Coal Co.....	Adamson, Okla.....	Wilburton, Okla.
Gunther, Andrew P.....	Bokoshe, Okla.....	Fort Smith, Ark.
Hailey-Ola Coal Co.....	Haileyville and Lutie, Okla.....	Haileyville, Okla.
Hartshorne Coal Co.....	Hartshorne, Okla.....	Hartshorne, Okla.
Hazleton Coal Co.....	Coalgate, Okla.....	Coalgate, Okla.
Indian Coal & Mining Co. <sup>2</sup> .....	Pocahontas, Okla.....	Asheville, N. C.
Kali-Inla Coal Co.....	Cambria, Okla.....	Hartshorne, Okla.
Keystone Coal Co.....	Coalgate, Okla.....	Coalgate, Okla.
Le Bosquet Coal & Mining Co.....	Hughes, Okla.....	Hughes, Okla.
Milby-Dow Coal Co.....	Dow, Okla.....	Dow, Okla.
Missouri, Kansas & Texas Coal Co.....	Wilburton, Okla.....	Wilburton, Okla.
Milton Cooperative Colony <sup>3</sup> .....	Milton, Okla.....	Guthrie, Okla.
McAlester-Choctaw Coal Co. <sup>4</sup> .....	McAlester, Okla.....	McAlester, Okla.
McAlester Coal & Coke Co.....	Buck, Okla.....	Do.
McAlester-Edwards Coal Co.....	Pittsburg, Okla.....	Do.
McCurtain Coal Land Co. <sup>5</sup> .....	McCurtain, Okla.....	McCurtain, Okla.
McMurray, John F.....	North McAlester, Okla.....	North McAlester, Okla.
North McAlester Coal Co.....	Krebs, Okla.....	McAlester, Okla.
Osage Coal & Mining Co.....	Panama, Okla.....	Panama, Okla.
Panama Coal Co.....		

<sup>1</sup> Operations of this company at Carbon carried on under working contract by Carbon Coal Co.

<sup>2</sup> Operations of this company carried on under contract by McAlester-Alderson Coal Co.

<sup>3</sup> Operations of this company carried on under contract by Milton Coal & Mining Co.

<sup>4</sup> Operations of the McAlester-Choctaw Coal Co. carried on under contract by Julian Coal Co.

<sup>5</sup> Operations of this company carried on under contract by Blue Ridge Coal Co.

*Coal leases—Continued.*

Name of lessee.	Mines at or near—	Principal office.
Pierce Coal Co.....	Adamson and Carbon, Okla.	Carbon, Okla.
Pocahontas Coal Co.....	Pocahontas, Okla.....	Hartshorne, Okla.
Phoenix Coal Co.....	Halley, Okla.....	McAlester, Okla.
Poteau Coal & Mercantile Co.....	Witteville, Okla.....	Poteau, Okla.
Rock Island Coal Mining Co. <sup>1</sup>	Alderson, Bache, Gowen, Heavener, Hartshorne, Okla.	Chicago, Ill.
Samples Coal & Mining Co.....	McAlester, Okla.....	McAlester, Okla.
Southern Fuel Co.....	Savanna, Okla.....	Do.
St. Louis-Galveston Coal & Mining Co. <sup>2</sup>	Lehigh, Okla.....	Oklahoma City, Okla.
Storrie & Rice.....	Blanco, Okla.....	Dow, Okla.
Superior Smokeless Coal Co.....	Williams, Okla.....	Williams, Okla.
Texas Coal Co.....	Hughes, Okla.....	Muskogee, Okla.
Thomas Coal Co.....	Blanco, Okla.....	McAlester, Okla.
Union Coal Co.....	Adamson, Okla.....	Hartshorne, Okla.

<sup>1</sup> Operations of this company carried on under contract on approved leases of the C. O. & G. R. R. Co.<sup>2</sup> Operations of this company carried on under contract by Oklahoma Mining & Stripping Co.*Asphalt leases.*

Name of lessee.	Mines at or near—	Principal office.
American Mineral Wax Co.....	Woodford, Okla.....	New York, N. Y.
Brodnax, W.....	Dougharty, Okla.....	McAlester, Okla.
Downard Asphalt Co.....	Ardmore, Okla.....	Ardmore, Okla.
Gilsonite Roofing & Paving Co.....	Gilsonite, Okla.....	Jumbo, Okla.
Rock Creek Natural Asphalt Co.....	do.....	Do.

## RATES OF ROYALTY.

The rate of royalty on coal is 8 cents per ton, mine run.

The rate of royalty on asphalt is 60 cents per ton on refined and 10 cents per ton on crude.

## AMOUNT OF COAL MINED.

The total amount of coal mined and the royalty paid thereon by each operator in the Choctaw Nation, Okla., during the fiscal year ended June 30, 1918, is shown in the following table:

*Total amount of coal mined and royalty paid thereon.*

Operator.	Tons.	Royalty.
Bache-Denman Coal Co.....	21, 104.00	\$1, 688.32
Bokoshe Smokeless Coal Co.....	12, 989.55	1, 039.16
Cameron Coal & Mercantile Co.....	47, 832.00	3, 826.56
Carbon Coal Co.....		
Central Coal & Lumber Co.....	184, 750.80	14, 780.06
Coalgate Co.....	104, 187.00	8, 334.96
Craig Coal & Mining Co.....	9, 113.00	729.04
Cutts, Geo. T., trustee.....	43, 510.00	3, 480.80
Degnan-McConnell Coal & Coke Co.....	25, 936.00	2, 074.88
Degnan-McConnell Coal Co.....	129, 171.00	10, 333.68
Denison Coal Co.....		
Dow Coal Co.....	9, 834.00	786.72
Eastern Coal & Mining Co.....	66, 161.00	5, 292.88
Eclipse Coal Co.....		
Folsom-Morris Coal & Mining Co.....	393, 017.00	31, 441.36
Gaines Creek Coal Co.....		
Great Western Coal & Coke Co.....	51, 279.00	4, 102.32
Gunter, Andrew P.....	33, 357.55	2, 668.60
Halley-Ola Coal Co.....	175, 472.00	14, 037.76
Hartshorne Coal Co.....	2, 204.00	176.32
Haskell Coal Co.....	33, 968.00	2, 717.44

*Total amount of coal mined and royalty paid thereon—Continued.*

Operator.	Tons.	Royalty.
Indian Coal & Mining Co.....	85,427.40	\$2,834.19
Kali-Inla Coal Co.....	89,503.30	7,160.26
Keystone Coal & Mining Co.....	30,057.00	2,404.56
Le Bosquet Coal & Mining Co.....	6,440.90	515.27
Milby-Dow Coal & Mining Co.....	129,978.50	10,398.28
Milton Cooperative Colony.....	54,198.00	4,335.84
Missouri, Kansas & Texas Coal Co.....	154,473.00	12,357.84
McAlester Coal & Coke Co.....	56,445.00	4,515.60
McAlester-Choctaw Coal Co.....	6,800.15	544.01
McAlester-Edwards Coal Co.....	74,494.00	5,959.52
McCurtain Coal Land Co.....	190,728.00	15,268.24
McMurray, Jno. F.....		
North McAlester Coal Co.....	21,435.00	1,714.80
Osage Coal & Mining Co.....	185,447.00	14,835.76
Panama Coal Co.....	590.00	47.20
Phoenix Coal Co.....		
Pierre Coal Co.....	14,755.00	1,180.40
Pocahontas Coal Co.....		
Poteau Coal & Mercantile Co.....	10,758.00	860.64
Rock Island Coal Mining Co.....	692,460.00	55,396.80
Samples Coal & Mining Co.....	56,813.00	4,545.04
Southern Fuel Co.....	88,097.00	7,047.76
St. Louis-Galveston Coal & Mining Co.....	74,981.00	5,998.48
Storrie & Rice.....	504.00	40.32
Superior Smokeless Coal Co.....		
Texas Coal Co.....	22,743.00	1,819.44
Thomas Coal Co.....	4,835.00	396.80
Union Coal Co.....	56,715.00	4,457.20
<b>Total.....</b>	<b>3,401,564.15</b>	<b>272,125.11</b>

Months.	Coal mined (tons).	Royalty.
July, 1917.....	289,412.80	\$23,153.02
August, 1917.....	274,667.90	21,973.43
September, 1917.....	244,948.55	19,595.90
October, 1917.....	272,151.75	21,772.14
November, 1917.....	277,074.15	22,155.93
December, 1917.....	272,000.35	21,790.02
January, 1918.....	320,834.55	25,666.76
February, 1918.....	327,628.80	26,210.30
March, 1918.....	268,636.05	21,490.89
April, 1918.....	267,295.90	21,383.67
May, 1918.....	311,005.00	24,880.40
June, 1918.....	275,908.05	22,072.65
<b>Total for year ended June 30, 1918.....</b>	<b>3,401,564.15</b>	<b>272,125.11</b>

## COMPARISON OF COAL OUTPUT.

The coal mined this year compared with that mined in 1917 shows an increase of 554,568.03 tons, as shown by the following statement:

	Tons.
Total coal mined, year ended June 30, 1917.....	2,846,996.12
Total coal mined, year ended June 30, 1918.....	3,401,564.15
<b>Increase.....</b>	<b>554,568.03</b>

## COMPARISON OF ASPHALT OUTPUT.

The asphalt mined this year compared with the output for the year ended June 30, 1917, shows a decrease of 2,432.08 tons, as shown by the following statement:

	Tons.
Total asphalt mined, year ended June 30, 1917.....	2,432.08
Total asphalt mined, year ended June 30, 1918.....	0.00
<b>Decrease.....</b>	<b>2,432.08</b>

## COAL AND ASPHALT ACREAGE LEASED.

The following statement shows the names of lessees of coal and asphalt lands in the Choctaw and Chickasaw Nations, Okla., and the numbers of acres and leases operated by each as of June 30, 1918:

*Coal acreage.*

Name of lessee.	Number of leases.	Number of acres.
Bache-Denman Coal Co.	1	960.00
Bokoshe Smokeless Coal Co.	1	640.00
Cameron Coal & Mercantile Co.	1	960.00
Carbon Coal Co.	1	640.00
Central Coal & Lumber Co.	7	6,720.00
Coalgate Co.	2	1,920.00
Craig Coal & Mining Co.	2	1,920.00
Cutts, Geo. T. (trustee)	6	6,280.00
Degnan-McConnell Coal & Coke Co.	5	4,800.00
Degnan-McConnell Coal Co.	1	1,000.00
Denison Coal Co.	1	960.00
Dow Coal Co.	2	1,280.00
Eastern Coal & Mining Co.	2	1,960.00
Eclipse Coal & Mining Co.	1	40.00
Folsom-Morris Coal & Mining Co.	10	9,880.00
Gaines Creek Coal Co.	1	160.00
Great Western Coal & Mining Co.	3	3,010.00
Gunther, Andrew P.	1	605.18
Hadley-Ola Coal Co.	4	3,960.00
Hartshorne Coal Co.	1	40.00
Hazleton Coal Co.	1	280.00
Indian Coal & Mining Co.	1	960.00
Kali-Inla Coal Co.	2	480.00
Keystone Coal & Mining Co.	1	340.00
LeBosquet Coal & Mining Co.	1	960.00
Mazard Coal & Mining Co.	1	960.00
Milby-Dow Coal & Mining Co.	2	2,560.00
Milton Cooperative Colony	1	160.00
Missouri, Kansas & Texas Coal Co.	1	960.00
McAlester Coal & Coke Co.	2	2,080.00
McAlester-Edwards Coal Co.	2	2,560.00
McAlester-Choctaw Coal Co.	1	960.00
McAlester-Galveston Coal & Mining Co.	1	480.00
McCurtain Coal Land Co.	7	6,680.00
McMurray, Jno. F.	5	4,800.00
North McAlester Coal Co.	1	960.00
Osage Coal & Mining Co.	7	7,320.00
Panama Coal Co.	1	960.00
Phoenix Coal Co.	1	444.90
Pierce Coal Co.	1	380.00
Pocahontas Coal Co.	1	960.00
Potomac Coal & Mercantile Co.	1	960.00
Rock Island Coal & Mining Co.	19	17,760.00
Samples Coal & Mining Co.	2	1,240.00
Southern Fuel Co.	1	1,890.00
St. Louis-Galveston Coal & Mining Co.	2	1,920.00
Storrie & Rice	1	640.00
Superior Smokeless Coal Co.	1	637.40
Texas Coal Co.	1	960.00
Thomas Coal Co.	1	627.94
Union Coal Co.	1	640.00
Total	124	111,315.42

*Asphalt lands.*

Name of lessee.	Number of leases.	Number of acres.
American Mineral Wax Co.	1	960
Brodnax, W.	1	960
Downard Asphalt Co.	1	360
Gilsonite Roofing & Paving Co.	1	960
Rock Creek Natural Asphalt Co.	1	640
Total	5	3,880

According to the foregoing statements, there were on June 30, 1918, 124 coal leases, covering 111,315.42 acres, all of which are in the Choctaw Nation, and 5 asphalt leases, covering 3,880 acres, all of which leases are in the Chickasaw Nation, or a grand total of 129 coal and asphalt leases, covering a grand total of 115,195.42 acres.

On October 30, 1917, the department canceled the asphalt lease of the Choctaw Asphalt Co. covering 960 acres in the Choctaw Nation.

On May 29, 1917, the department approved the lease of the Thomas Coal Co., covering 627.94 acres of the unleased segregated coal area of the Choctaw Nation. Quadruplicate copy of the lease, together with notice of approval by the department, was received by this office on August 8, 1918.

On May 29, 1917, the department approved the lease of the Bokeshe Smokeless Coal Co., covering 640 acres of the unleased segregated coal area of the Choctaw Nation. Quadruplicate copy of said lease, together with notice of departmental approval, was received by this office on March 30, 1918.

On August 1, 1917, the department approved the assignment from J. S. Downard to W. Brodnax of one asphalt lease consisting of 960 acres, in the Chickasaw Nation.

In the supervision of mining operations on the segregated coal and asphalt lands belonging to the Choctaw and Chickasaw Nations the Mining Trustees are advised by the local representative of the Bureau of Mines in regard to the proper methods of mining to be followed on the segregated lands. The Mining Trustees check the royalty returns from the various lessees operating mines on segregated lands from the books kept by the lessees at the mines and from the weigh sheets of the miners. From time to time occasion arises for the exercise of proper mining judgment in regard to location of proper operation of mines on segregated lands, and on such occasions the trustees and the local representative of the Bureau of Mines collectively consider these questions.

Up until the present time the amount of coal received by the mines operating on segregated lands varies from 45 to 50 per cent, and in some extreme cases as much as 60 per cent is recovered, but this is unusual, the average recovery being about 50 per cent. By such recovery is meant the proportion of coal actually mined and loaded on railroad cars in proportion to the amount in the seam in which the mining operations are being carried on. If a proper system of mining were followed there is no question but that the recovery would be at least 80 per cent, and the nations would receive at least 30 per cent more royalty than they do under present mining systems. It should be remembered that the 50 per cent of the coal seam which is left in the ground can not be recovered, at least not under present market conditions, and not only is this coal lost to the nations forever, but the royalty is also lost.

In order to realize the fullest possible returns of royalty all of the coal in the seam should be mined by machines, as hand mining is at present impracticable. To this end it would be to the advantage of the Choctaw and Chickasaw Nations, who are owners of the coal, if the properties were in the hands of one or more companies of ample capital. As long as mining by small operators of insufficient capital is permitted there will be a loss of coal, and to some

extent a loss of life, due to improper and wasteful mining methods. We are of the opinion that the Mining Trustees should be authorized to restrict the number of openings made in the coal mines on segregated lands in order that the production may not be increased to such an extent that the market will not absorb it profitably. Such restrictions can be wisely imposed by the trustees, acting under the direction of the Indian Office.

In the supervision of mines on segregated lands in Oklahoma cognizance should be taken of labor conditions, especially where restrictions are imposed upon mining operations, such as operate to the detriment of the owners of the coal. The department should also use its influence in order that the lessees operating mines on Indian lands should be accorded proper freight rates for transportation of their coal to the market. In the operations of oil and gas wells on Indian lands pipe line companies have always made concessions to the interest of the Indian owners, and it is thought that the railroads will, in like manner, make concessions to the lessees of mines on Indian lands.

Along with our regular duties of supervising the leases on segregated coal and asphalt lands of the Choctaw and Chickasaw Nations during the past fiscal year, we have assisted the Superintendent of the Five Civilized Tribes in the sale of the surface at a number of different points over the segregated coal and asphalt area, and have also assisted the appraisers who were appointed under the act of February 8, 1918, to appraise coal and asphalt mineral belonging to the Choctaw and Chickasaw Nations, furnishing them with such information as we had in the office and accompanying them over the entire area.

Respectfully submitted.

WILLIAM R. MCINTOSH,  
*Mining Trustee of Choctaw Nation.*  
J. HAMP WILLIS,  
*Mining Trustee of Chickasaw Nation.*



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# REPORT OF THE GOVERNOR OF ALASKA

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TERRITORY OF ALASKA, OFFICE OF GOVERNOR,  
*Juneau, October 15, 1918.*

SIR: I have the honor to transmit herewith my annual report as Governor of Alaska, for the fiscal year ending June 30, 1918, together with appendixes relevant to the Territory.

Respectfully,

THOMAS RIGGS, JR., *Governor.*

The SECRETARY OF THE INTERIOR,  
*Washington, D. C.*

## REPORT OF THE GOVERNOR OF ALASKA.

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### GENERAL CONDITIONS.

While the industry of the Territory during the past year has shown great progress along certain lines, notably in the production of fish, still, in the main, Alaska has suffered intensely from the great war. We have none of the unnatural war industries, such as giant shipyards or munition plants, with their greatly increased scale of wages. Our young men have flocked to the colors in great numbers, either through the draft or enlistments; our mechanics have answered the call of the Government for skilled labor and a large proportion of the population, seized by the general restlessness of the country, has left for the scenes of greater excitement and activity. As a result, the normal industry of the country has been paralyzed; mines, fisheries railroad construction, shops, and ships are all working with insufficient forces. It is all part of Alaska's contribution to the welfare of humanity; all is given freely and fully, and, if need be, greater sacrifices will be made without question or complaint.

The greatest loss has been in man power. It is safe to predict that by the end of the calendar year scarcely 18,000 white people will be left in the Territory. Practically every outgoing steamer is loaded to capacity, and when the seasonal industries of fishing, placer mining, and railroad construction are finished for the year the exodus will be almost in the nature of a stampede. The loss of population is particularly noticeable in the interior and on the Seward Peninsula.

Under such circumstances new development is practically impossible nor will relief be found until the Teutonic menace to civilization is removed. Then it is that we may hope for a return of prosperity brought to us by those fine young Americans now doing their duty so nobly on the battle fields of France. It is reasonable to suppose, following the declaration of peace, that men drawn from the more settled and staid portions of the United States and thrown into the atmosphere of adventure and outdoor life will not be content to settle down to their former humdrum existence of the factory, office, or farm, but that they will seek a wider horizon and greater possibilities here than offered by their return to former occupations. I look for a great immigration when once the armies of the world are disbanded, and in fact even now I am in receipt of inquiries from soldiers, not only of our Army but of the British Army, for information relative to possible occupation. We should be prepared to assist our future residents. As will be shown, we must have ample and immediate governmental help to make the Territory an attractive field to the future resident.

## GOLD MINING.

A large proportion of our people are dependent upon the success of gold mining. Undoubtedly this industry has been the hardest hit of all Alaskan enterprises. The price of all commodities except gold has soared heavenward, while the price of gold with its greatly increased cost of production and greatly decreased purchasing power has remained stationary.

At present there are few working placer mines of the fabulous richness which drew the attention of the world to Alaska. Instead, we have now the lower grade alluvial gravels with their more even distribution of gold, which are worked along business principles. Such mines are shutting down as rapidly as possible, awaiting the day when prices of supplies and equipment are once more normal and when labor is more plentiful. Practically all of the placer mines are found in the interior of Alaska and on the Seward Peninsula, and it is these sections which are the greatest sufferers in all lines.

Lode mining is found more in the coastal district with all of the largest mines in the first division. The largest mines are those in the vicinity of Juneau and are working on a grade of ore in which margin of profit is very close. Owing to the low grade of ore, the mines are unable to pay wages such as will attract miners, with the result that they can not obtain men in sufficient numbers to more than run the mills on one shift of eight hours, and even with only one mill shift, not enough miners can be procured to break the requisite amount of ore without drawing on the mine reserves.

If the gold-mining industry is to be preserved for Alaska, yes, even of the United States, there must be some form of encouragement offered by the Government, or quantity production of gold will practically cease. This encouragement could come in the form of a readjustment of the method of paying for gold bullion. To arrive at the most satisfactory method of making this readjustment there should be some advisory body. I should suggest a committee composed of a representative of the Treasury Department, a representative of the Bureau of Mines and a representative of the Federal reserve banks.

## TRANSPORTATION.

All transportation tariffs affecting Alaska have been materially increased during the year. The effect has not been particularly noticeable in the matter of foodstuffs, although the great increase in living expenses has been generally attributed to this score. Where in truth a great hardship on the consumer has been worked is in the tariff advance on heavy commodities, such as mine and mill equipment and supplies, coal, hay, and oats, and fuel oils.

The second division has been particularly affected by the high cost of coal. The going retail price of coal at Nome in the treeless country is \$30 per short ton, with the probability of an advance to \$35 or even \$40 before the winter sets in. With no other authority than newspaper reports it has been noted that the operations of railroads in the United States resulted in a loss to the Nation of \$290,000,000 during the first six months of 1918. As transportation is vital to the growth of the country and even to its very existence as

a commercial factor it is my firm belief that the Government may well suffer a comparatively small financial loss for the sake of aiding a Territory which furnished trade during 1917 to the United States proper in excess of \$131,000,000.

The exact trade figures for the various Territories with the United States are here given for sake of comparison:

*Total value of exports and imports to and from the United States 1917.*

Alaska	\$131, 767, 788
The Philippines	126, 524, 812
Porto Rico	124, 461, 408
Hawaii	123, 039, 441

Although Alaska is thus shown to be of more value than any other Territory to the United States it seems to receive the least consideration.

My proposal is that the United States shall take over, for the period of the war and until such time as conditions shall have readjusted themselves to the prewar status, all transportation by steamships or railroad lines, to and in the Territory of Alaska, charging such freight and passenger tariffs and maintaining such schedules as will allow and encourage the continued development of the Territory. If such a course can not be taken then at the very least there should be established at the port of Seattle, Wash., and at Juneau, Alaska, dispatchers who shall regulate the placing of cargoes on the carriers of the various steamship lines so that there shall not be unnecessary duplication of call, and so that vessels besides being placed on runs and schedules to best suit the demands of the country may also have an equitable allotment of space made to all consignors. By the establishment of schedules the fresh-fish industry will be greatly fostered and by the allotment of cargo space it will be possible to afford a comparatively large Alaskan market for Alaska coal.

The Department of Commerce has issued instructions that hereafter fish may be shipped between ports in Alaska and in the United States in foreign bottoms through the remission of penalties imposed therefor. This action was brought about by an existing danger being shown by the governor and the Food Administration of fish being spoiled and wasted, due to irregular steamship service; and that all vessels, both domestic and foreign, should be permitted to carry fresh fish, the prompt handling of which is imperative.

With competing lines it is natural that there shall be little attention paid to conflicting sailing schedules, and there must be a resultant loss to the companies themselves. This particularly is true at minor ports. I have seen three vessels at Skagway waiting to be unloaded by the one longshore crew. At St. Michael and Nome I have again seen three vessels in port at the same time with only one longshore crew available at each place. One of these vessels was under demurrage for three weeks, due in part, however, to a storm which made unloading impossible for the time. Such confusion in schedule is not only a hardship to the vessel but also connecting river and rail lines and to the longshore crews. Shipping to and from Alaska should be taken promptly in hand, so that there may be uninterrupted service given at every point. My preference of the two suggested methods of handling transportation lies with Government operation until the chaotic and world abnormal conditions cease.

## AGRICULTURE.

It is hardly possible for the immediate present that agriculture can be considered in Alaska to any great extent, apart from an existing mining and fishing population. Farmers are dependent upon local markets and, owing to a depleted population, are facing a serious condition. Farming communities are those which make for the stability of the country. They should be given every encouragement and assistance. I must confess that heretofore I have never been greatly impressed with our farming possibilities, having always been connected with mining or engineering enterprises, but now I am glad to admit my error and to be able to state that I believe Alaska can be made almost absolutely self-supporting in the matter of food. I find in the Tanana Valley that the experiment stations of the Department of Agriculture have developed a Siberian wheat which has successfully ripened for four successive years and may not be termed hardy to the country. This year 35 farmers of the Tanana Valley have planted 50 acres in this wheat and next season with the seed so raised, will probably plant in the neighborhood of 500 acres. I shall use every endeavor to establish a small flour mill in the farming center so that by 1920 every pound of flour used in the interior of Alaska may be from locally ground wheat.

The vegetable growth of Alaska is wonderful. A market must be supplied outside of Alaska, and this can be found only by reducing vegetables to a dehydrated form. A modern dehydrating plant is inexpensive. The most promising present market will be found in northern Siberia.

Farming is most highly developed in the Tanana Valley, but the Matanuska Valley is steadily forging to the front.

Until markets are developed for agricultural products I do not advocate a too speedy rush to the farm, but as our population increases, and as new markets are found, farming will undoubtedly become one of our greatest assets.

## POPULATION.

A study of the census report of 1910 in conjunction with the figures of arrivals and departures furnished by the collector of customs would seem to indicate that on June 30 there was a population of approximately 40,000 white people in Alaska. The manager of the Alaska Red Cross membership drive, in December, 1917, after extensive correspondence with postmasters and commercial organizations, made an approximation of 25,200 persons. He estimates that there will be a loss of 10,000 persons during 1918, which closely coincides with the estimate of the collector of customs and of myself. My own estimate of the population for June 30 is 28,000 white persons which, when the yearly exodus takes place, will reduce permanent population to not more than 18,000.

It would seem that the figures of the census of 1910 and of the collector of customs must be correct, yet it also seems strange that there should be 12,000 white people in Alaska who can not be accounted for.

Unless greater encouragement than ever before is offered to the settler and investor in Alaska, the Territory will practically become depopulated.

From what information I can gather from missionaries and school-teachers, I judge that among the natives the birth rate now exceeds the death rate.

#### NATIVES OF ALASKA.

I have been devoting considerable time to the study of the various problems confronting the natives, but the tribes are so widely scattered and the conditions under which they live are so varied that at the present time I do not feel justified in going into the subject at length.

The Bureau of Education is doing splendid work, especially among the Eskimos who have been taught the value of reindeer herding. As a result many natives have become comparatively wealthy.

The various missionary bodies have been requested for reports on their activities, but to date only partial replies have been received and so can not be fully commented on. I have, however, visited a number of the mission schools and can testify as to the excellence of their endeavors and to the really constructive results accomplished.

#### ALASKA NATIVE SCHOOL SERVICE.

The schools for native children in Alaska are under the supervision of the Bureau of Education of the Interior Department, being directly supervised by five district superintendents in Alaska, responsible to the chief of the Alaska Division of the Bureau of Education, with headquarters in Seattle. For the past year these schools numbered 71, two of which were summer schools having a total enrollment of approximately 3,500.

The majority of these schools are located in native villages, each of which is usually in charge of a man and wife. On account of the variety of the work in connection with a native school the Bureau of Education finds it advantageous to appoint married people. Not only must these Federal employees be capable of teaching school, but they must also possess practical abilities which will enable them to promote native industries, domestic arts, personal hygiene, social welfare, and in general improve the living conditions of the adult as well as the school population of the village and the vicinity.

The schoolroom and living quarters of the employees are usually under one roof, forming a center from which quite often there issues the only uplifting and civilizing influence in that community.

There has been and still is an attitude of aloofness toward the native population by the white people of Alaska which is not conducive to rapid advancement by the former race. Quite often the bureau employees and the missionaries are the only whites who seem to have any interest in the natives' welfare. Until a tolerant and sympathetic attitude is generally exhibited by the white race, the natives will be constantly handicapped in their efforts to reach a higher plane of civilization. The natives of Alaska are unquestionably an asset to the Territory, and the intelligent development and improvement of this asset will be remunerative to Alaska in many ways. These native Alaskans are self-reliant, law-abiding, and honest, and the only help they have had from the Federal Government is the establishment of schools in the larger villages, a little medical relief, and the introduc-

tion of reindeer among the northern and western tribes. This assistance has been given them through the organization of the Alaska Division of the Bureau of Education.

Because of the fact that the native population is very scattered and the villages have rarely over 200 or 300 inhabitants, and generally much less than that, the bureau's educational efforts have been rather hampered. Were the natives located in large settlements of 500 or more, their education, medical relief, and industrial advancement would be simplified considerably. To this end the bureau has gradually been working toward attracting the natives to selected sections of land which have been reserved for the exclusive use of the natives and the bureau. These reserves are not to be confused with the Indian reservations of the States as they in no way interfere with the liberties and freedom of the native inhabitants thereon. By establishing industries on these reserves which will give the natives work the year around, schools that have more than the elementary grades, and by placing the care of their physical welfare in the hands of trained medical employees, the bureau will be able to secure maximum benefits to the natives. As long as the bureau's work is confined to numerous small villages, only minimum results can be expected at a heavy cost per capita. At the present time the small schools do not justify grammar grades, and it has been customary for advanced native children to enter the Indian schools of the States. This usually results in physical breakdowns due to the change of climate, environment, and absence from home. It should be possible for native children to advance as far along educational lines as they desire without the necessity of leaving home. This can come only when the natives are persuaded to live in larger communities which will justify the establishment of larger and more complete schools. The concentration of the bureau's work on large villages, made possible through the favorable conditions of the reserves, will hasten the arrival of the day when the native of Alaska will take his place along with his white brother in the affairs of the Territory.

That the natives are loyal to the United States has been especially proved the past year through the work which the natives have contributed for the Red Cross and the purchases they have made of Liberty bonds and War Savings Stamps. Through the agency of the teachers, Red Cross auxiliaries have been established in many native villages, and the zealous and untiring work of these native organizations is a great credit to them. The work done in knitting, sewing, etc., for the Red Cross is equal to the best work done by white organizations.

The purchase of bonds and stamps has not lagged behind the Red Cross work, and while complete statistics of the Bureau of Education are not yet available on this subject, the reports from 11 native villages in southeastern Alaska show that \$12,320.85 was contributed toward war-relief funds and that \$9,700 worth of Liberty bonds and \$283.70 worth of stamps were purchased. In these villages there are 1,303 Red Cross members, and during the year 16 sweaters, 328 socks, 113 wristlets, 220 gun wipes, 30 scarfs, and 12 moccasins were made for the Red Cross. It has been very gratifying to hear the numerous expressions of regret by natives throughout the Territory that they should have been exempted from the operations of the draft law, and

it is hoped that the matter will be adjusted so as to allow the natives to share in this as well. Their participation will be a credit to the Territory, as have been their other war activities.

The need of a power boat for the bureau's work has been especially emphasized this year. The schools have been supplied this season with the greatest difficulty, and the shipments to the various stations have been necessarily haphazard and unsatisfactory. A notable example of the difficulties encountered is the shipment of hospital supplies and subsistence stores for teachers and a physician into Bristol Bay, which were to have been sent in by the August trip of the *Dora*. This trip, the last of the season for that section, was suddenly canceled and no other means was available. Since the supplies were imperatively needed by the stations in Bristol Bay, arrangements were finally made with the Pacific American Fisheries to carry them to King Cove, from which place the Coast Guard cutter *Unalga* is expected to have taken them to Unalaska, where they are to be transhipped to Bristol Bay via the *Admiral Watson*. Whether the needed supplies reached their destination is still a matter of conjecture. With a boat of its own, the bureau would have its shipping problems very much simplified. Such a boat would be used during the summer for the shipment of supplies and transportation of employees, who now must quite often be sent in small gas boats and vessels of doubtful seaworthiness. The bureau should not have to be placed in the position of asking its employees, who are self-sacrificing enough to enter its service to risk their lives and property in reaching their stations. After completing the summer's shipping, the boat would be available as a training ship at the bureau's stations in southern and southeastern Alaska, where navigation is open throughout the year. Thus the boat would be put to useful service the year around. It is to be hoped that Congress will promptly make possible such a boat for the bureau.

To a considerable extent, the questions arising in connection with the fishing industry of the territory involve the consideration of the natives' welfare. The native people of Alaska are primarily fishermen. They are an important factor in the industry, and fishing to them is essentially a means of livelihood. The elimination of fish from the natives' diet means the omission of the greater part of his natural food, resulting in actual want and serious illness. Consequently, the question of commercial fishing in the rivers of Alaska is of vital interest to the native. The past year has seen the partial closing of the Copper River to commercial fishing. Whether the regulations issued are sufficient to result in reestablishing the food supply of the Copper River Indians will be ascertained after they have been in force a reasonable length of time. The establishment of a cannery at Andreafsky, on the lower Yukon, brings up a similar question. While one or two canneries would probably not seriously interfere with the supply of fish for the upper Yukon, it is very probable that the number of canneries would increase each year until the river would become overfished, as was done in the Copper River. If commercial fishing must be permitted in rivers, a policy of limited fishing is the only one that will safeguard the food supply of the natives.



## ALASKA NATIVE MEDICAL SERVICE.

In the list of duties for the teacher of a native school there appears that of medical relief, which assumes considerable proportions if the village is of good size. Some of the more important centers of native population are provided with trained nurses, but at the majority of villages the teacher must attend to the physical welfare of the inhabitants. Each school is provided with a very complete standard medical set, consisting of the more common medicines and medical equipment, with a view toward enabling the teacher to relieve the less serious ailments and afford temporary relief in cases requiring the attention of a physician. Each station is also provided with a medical book written especially for use in connection with the medical equipment furnished the schools. Through necessity some of the teachers become quite expert in this phase of their work. In this they are aided materially by the fact that the natives have marvelous recuperative power and quite often only a little medical assistance is necessary to bring them back to health.

During the past year the Bureau of Education also operated a very complete 20-bed hospital for natives at Juneau, which was kept filled the greater part of the year. The hospital at Kanakanak, on Bristol Bay, was enlarged and completely equipped for 11 beds capacity. A modern hospital was erected and placed in operation at Akiak, on the Kuskokwim. Its capacity is also 11 beds, together with comfortable quarters for the staff. A small hospital, in charge of a physician and nurse, was also maintained at Nulato, on the Yukon. In addition to the hospitals, physicians were stationed at Nome and Cordova, and contracts were had with resident physicians at Ellamar, Candle, and Council to care for cases in their localities. Besides a traveling nurse for southeastern Alaska, nurses were appointed at St. Michael, Unalakleet, and Metlakatla.

In view of the thousands to be reached and the vast territory to be covered it is readily apparent that the above means of meeting the medical needs of the natives is wholly inadequate. The bureau's appropriation of \$62,500 is just half of the minimum amount needed during normal times to make an effective beginning. On account of the great advance in prices of drugs, etc., not less than \$150,000 should be appropriated for this year. Educational advantages are of little benefit to the native if he is not assisted at the same time in keeping his body healthy, so as to enable him to make the best possible use of that which his mind acquires. The appropriations for education and medical relief of the natives must necessarily go hand in hand and the proper equilibrium maintained between them.

This fall the bureau plans to open a tubercular sanitarium at Haines, establishing the same in the building formerly occupied by the Presbyterian Mission Hospital. To avoid a duplication of work in southeastern Alaska the mission board has turned this building over to the Bureau of Education for its use in maintaining a sanitarium, and the bureau has relinquished its medical work at Hyaburg and Klawock, where the mission board will be in exclusive charge of the medical work among the natives. The arrangement should be mutually advantageous. The establishment of a tubercular sanitarium has been planned for several years and will fill a long-felt need in southern and southeastern Alaska. In the past tuberculosis,

which is quite prevalent among the natives, has been very hard to combat since isolation of the cases was impossible. The spread of the disease was therefore unavoidable. However, with a sanitarium at hand, to which the patients can be sent for proper diet, treatment, and instruction, a long step will be made toward checking the disease in the section which the Haines establishment will serve.

With a hospital at Juneau for the surgical cases, and a sanitarium at Haines for tubercular patients, southeastern Alaska will be served very effectively. It is to be hoped that Congress will soon enable the Bureau of Education to make similar provisions for the other sections of Alaska, which are equally in need of medical assistance.

#### ALASKA REINDEER SERVICE.

In 1892, and continuing for 10 years, 1,280 reindeer were imported into Alaska from Siberia. From this nucleus there are to-day in Alaska over 110,000 reindeer, distributed over all of western Alaska from the Alaska Peninsula on the south to Point Barrow on the north. On account of the unavoidable delays in securing reports from all the herds, complete statistics for the year are not yet available. The Bureau of Education report for the year ended June 30, 1917, shows a total of 98,582 deer in Alaska, distributed among 98 herds; 67,448, or 69 per cent, were owned by natives; 23,443, or 23 per cent, by Lapps and whites; 4,645, or 5 per cent, by missions; and 3,046, or 3 per cent, still remain Government property. The ownership of the native deer was divided among 1,568 natives, of whom 170 were apprentices and 1,398 owners and trained herders. An income from their deer amounting to \$97,515 was realized by them, exclusive of hides and meat used by themselves. The income accruing to owners other than natives amounted to \$35,002, making a total income realized from the reindeer industry of \$122,517.

Reindeer were introduced into Alaska by the Government in order to insure a food supply and economic independence for all the natives of Alaska living in sections where deer could be propagated. The industry is now firmly established, the widespread distribution of the deer being the result of a system of apprenticeship whereby the most likely natives are taken on as apprentices by the herders for four years, receiving during that time 6, 8, 10, and 10 deer for the first, second, third, and fourth years, respectively. If at the end of the fourth year the apprentice has served satisfactorily, he becomes a herder, assuming charge of his deer. He in turn is required by the rules and regulations to take on apprentices in the same manner that he served as apprentice. The perpetual distribution among the natives is thereby assured.

Since the deer were imported for the benefit of the natives, the industry has been restricted to them as much as possible. No native is allowed to sell female deer except to another native or the Government. Until 1914 no white men had acquired deer, except the Laplanders, who had been brought to Alaska at the time of the introduction of reindeer into Alaska for the purpose of teaching the natives the art of herding. For their services the Lapps were given reindeer without restrictions as to future sales of female deer. By this means it was possible for Lomen & Co., of Nome, to acquire 1,200 deer in 1914. The next two years this company made addi-

tional purchases from the missions at Golovin and Teller, the latter of which has since been the subject of litigation by the Department of Justice at the request of the Interior Department. The case is based on alleged violation of contract by the Teller mission, which, in common with other missions in Alaska, received deer from the Government for the purpose of assisting in the distribution of deer among the natives. All missions have always been held by the department to be under the same restrictions as native owners. The final outcome of the Teller case will determine the department's action regarding the Golovin sale, which is similar to the Teller case, except that the Golovin contract appears to have been an oral one made in the early days of the industry, the exact terms of which can not be definitely established. The decision in the Teller case will also have an important bearing on all deer now owned by the missions. The details of the above have appeared in previous issues of the annual report of this office. Up until the present the industry has been supervised by local representatives of the Bureau of Education, but it has now grown to such proportions that a scientific management is imperative. At least two or three experienced stockmen should be placed in the field to give their entire time to the study of the problems of the industry. Diseases of the deer should have careful attention, as well as scientific herding, breeding, butchering, and marketing. The reindeer of Alaska represent an immense food supply, not only for the Territory, but for the entire country. The economical and permanent entry of reindeer meat upon the market of the country is a problem that will require much study and careful management. The present high prices of beef, pork, and mutton make this an opportune time to take up this subject energetically. It is important to the country, as well as to the Territory, that the increased appropriation asked for by the Bureau of Education be allowed by Congress in order to make possible the employment of the experts mentioned. Undoubtedly the white owners of herds will cooperate.

Reindeer are cursed with warble flies, which were evidently brought to Alaska with the original herd. If the warble pest could be eliminated there is no reason why a glove industry equal to that of Sweden could not be established right in Alaska.

The following table shows what a financial success this phase of Government enterprise has been during the 25 years since its inception:

Valuation of 67,448 reindeer owned by natives in 1917, at \$25 each--	\$1, 686, 200
Total income of natives from reindeer, 1893-1917 (25 years)-----	568, 352
Valuation of 31,134 reindeer owned by missions, Laplanders and other whites, and Government, 1917-----	778, 350
Total income of missions and Laplanders and other whites from reindeer, 1893-1917-----	214, 443
Total valuation and income-----	3, 247, 345
Total Government appropriations, 1893-1917-----	317, 000
Gain (926 per cent for 25 years, or an average annual gain of 37 per cent)-----	2, 930, 345

Perhaps the attitude of the Bureau of Education is somewhat at variance with my own, but I believe that where the reindeer industry can be encouraged among the whites without detriment to the natives

every assistance should be offered, as it is only through the white owners and shippers that it will be possible to add to the food supply of the country at large. With the herds scattered over such a large extent of territory, and with such great distances to travel to reach the few shipping points on our west coast, it will soon become necessary to establish cold-storage plants at certain points in order to preserve the meat of the surplus deer. In this the whites interested in the industry can be of greatest service to the native deer men. The Government has no funds with which to create a market, nor with which to preserve the meat for the market, so that this particular branch of the industry must naturally fall to the whites.

#### FISHERIES.

The development of the fisheries industry of Alaska as a whole was greatly accelerated in 1917. The investment, the quantity of the output, and its value were all greater than in any preceding year. The increased output was of national importance, coming as it did at a time when an increase in the food supply was so essential.

In July, 1917, the Bureau of Fisheries, with the assistance of the War Department, established a fishery intelligence service for the coastal towns where there are offices of the Washington-Alaska Military Cable and Telegraph System. Agents of the Bureau of Fisheries at Seattle and Ketchikan assemble scheduled information regarding market prices of fishes, which are then transmitted to the various towns.

Attention has also been given by the Bureau of Fisheries to the removal of natural obstructions in streams for the purpose of enhancing their value as spawning grounds for salmon. Some progress has been made to this end. The introduction of the Scotch method of curing herring, through distribution of literature and the giving of instructions by demonstrators in the field, is taken up in greater detail under the subject of herring. Dr. C. H. Gibert, of Stanford University, has continued to devote a portion of his time to the investigation of certain scientific and practical fish-cultural problems.

The enforcement of the law and regulations for the protection of the fisheries was furthered in the season of 1917 through the use by the Bureau of Fisheries of two new patrol boats built especially for the purpose. Another advance was made in the season of 1918 when a policy was adopted of employing stream watchmen who individually give continuous supervision to a limited but important fishery ground assigned to each. These watchmen were stationed at various strategic points in southeast and central Alaska, and their work will undoubtedly result in a better observance of the fisheries laws and regulations.

#### SALMON HATCHERIES.

In the fiscal year 1918 six salmon hatcheries were operated, two by the Government and four privately, by companies engaged in canning salmon. Operations at one of the private hatcheries were limited to the extent necessary for releasing young salmon hatched from eggs taken in the fall of 1916. Companies engaged in canning salmon in Alaska are allowed a deduction from the taxes due on their

canned product to the extent of 40 cents for each 1,000 red or king salmon fry released. In the fiscal year 1917 there were released from the privately owned hatcheries 83,350,000 red salmon fry, thus relieving their owners of taxes to the extent of \$33,340.

In the season 1916-17 the total number of young red, or sockeye, salmon liberated was 155,641,000, of which number 72,291,000 were released from Government hatcheries. In the calendar year 1917 there were taken in connection with Government hatcheries 90,698,000 and at privately owned hatcheries 25,266,000 red, or sockeye, salmon eggs. In the same period there were also taken 4,113,000 humpback-salmon eggs by the Government hatcheries and 2,400,000 at one of the other hatcheries.

#### NUMBER OF PERSONS EMPLOYED.

The number of persons employed in the fisheries in Alaska in 1917 was 29,491. Of these, 16,043 were classed as whites, 6,170 as natives, 1,643 as Japanese, 2,274 as Chinese, 1,547 as Mexicans, and 1,814 as miscellaneous, including Filipinos, negroes, Porto Ricans, etc. The total number in 1916 was 23,994, or 5,497 less than in 1917.

#### INVESTMENTS IN ALASKAN FISHERIES.

The total investment in the fisheries of Alaska in 1917 was \$54,937,549, of which \$46,865,271, or approximately 85 per cent, was invested in the salmon-canning industry. The investment of \$54,937,549 in 1917 compares with an investment of \$39,569,612 in 1916, an increase of \$15,367,937 in 1917. With respect to the 1917 investment approximately \$24,600,000 was in southeast Alaska, \$10,700,000 in central Alaska, and \$19,650,000 in western Alaska. Other information in regard to investments are given in connection with the details of the more important subdivisions of the industry.

#### QUANTITY AND VALUE OF PRODUCTS.

The total value of Alaska's fishery products in 1917, exclusive of aquatic furs, was \$51,466,980. The value of the 1917 products exceeded by \$25,310,421 that of 1916, which was \$26,156,559. The quantity and value of the various products of the Alaska fisheries in 1917 were as follows: 5,947,286 cases of canned salmon, valued at \$46,304,090; 2,850,400 pounds of mild-cured salmon, valued at \$344,028; 36,390 barrels of pickled salmon, valued at \$590,497; 4,559,785 pounds of fresh salmon, valued at \$404,048; 1,282,182 pounds of frozen salmon, valued at \$81,574; 377,000 pounds of dry-salted, dried, and smoked salmon, valued at \$53,844; 7,038,283 pounds of fresh halibut, valued at \$605,205; 6,115,128 pounds of frozen halibut, valued at \$515,021; 13,777,470 pounds of cod, valued at \$744,976; 49,245 cases of canned herring, valued at \$326,522; 23,082 pounds of fresh and frozen herring (for food), valued at \$907; 6,089,780 pounds of fresh and frozen herring (for bait), valued at \$57,556; 4,593,025 pounds of pickled herring (for food), valued at \$248,299; 165,000 pounds of dry-salted herring (for food), valued at \$11,349; 21,600 pounds of smoked herring (for food), valued at \$700; 205,992 gallons of herring oil, valued at \$82,396; 1.037 tons of herring fertilizer, valued at \$40,000; 900,883 gallons of whale oil, valued at \$438,362; 197,670 gal-

lons of sperm oil, valued at \$149,270; 1,980,600 pounds of whale fertilizer, valued at \$61,720; 14,866 pounds of whalebone, valued at \$5,500; 7,798 pounds of frozen trout, valued at \$701; 34,800 pounds of pickled trout, valued at \$1,899; 35,168 pounds of fresh trout, valued at \$3,317; 1,408 cases of canned trout, valued at \$10,979; 1,020,490 pounds of sable fish, valued at \$38,303; 150,453 pounds of red rockfish, valued at \$3,696; 114,167 pounds of miscellaneous fresh fish, valued at \$2,247; 74,515 cases of clams, valued at \$274,036; 65,000 pounds of shrimps, valued at \$3,400; 410 dozen of crabs, valued at \$665; 25,150 gallons of by-products, oil, valued at \$19,560; and 1,642,000 pounds of by-products, fertilizer and meal, valued at \$42,313.

#### THE SALMON INDUSTRY.

As in previous years the salmon industry remained the predominant factor in the fisheries of the Territory. The value of its output was several times that of all the other fishery products combined. All five species of salmon taken in Alaskan waters are used to the fullest possible extent. The total output in 1917 exceeded both in quantity and value that of any previous year.

The commercial methods of preserving salmon in Alaska for future use are by canning, mild curing, pickling, freezing, dry salting, dry, ing, and smoking. There is also a considerable trade in fresh salmon.

The principal methods of taking salmon are by beach and purse seines, gill nets, and pound nets, or traps. In 1917 the number of seines used was 599; gill nets, 5,113; and pound nets, or traps, 470.

In 1917 the total number of salmon taken in Alaska was 92,600,495. The take by species was as follows: Coho, or silver, 2,104,253; chum, or keta, 8,527,578; humpback, or pink, 44,875,241; king, or spring, 596,346; red, or sockeye, 36,497,047. The total take in 1916 was 72,055,971, or 20,544,524 less than in 1917. Comparing the take by species, more chums, humpbacks, and reds were taken in 1917 than in 1916, while the take of cohos and kings was greater in 1916.

*Salmon canning.*—The value of the output of canned salmon in 1917 represented about 97 per cent of the value of the total products of the salmon industry. The investment in the salmon-canning industry amounted to \$46,865,271, of which \$19,929,055 was in south-east Alaska, \$9,412,791 in central Alaska, and \$17,523,425 in western Alaska. The total investment in 1916 was \$34,100,853, or \$12,764,418 less than in 1917. In each of the three sections mentioned there was a larger investment in the salmon-canning industry in 1917 than in 1916. The number of persons engaged in 1917 was 23,350, an increase of 4,110 over 1916. The output of canned salmon in 1917 consisted of 5,947,286 cases, valued at \$46,304,090, as compared with 4,900,627 cases in 1916, valued at \$23,269,429. The pack and value, according to species, in 1917 were as follows: Coho, or silver, 193,231 cases; valued at \$1,682,745; chum, or keta, 906,747 cases, valued at \$5,572,047; humpback, or pink, 2,296,976 cases, valued at \$14,794,062; king, or spring, 61,951 cases, valued at \$644,447; red, or sockeye, 2,488,381 cases, valued at \$23,610,789. In 1917 there were operated in the salmon industry 118 canneries, as compared with 100 in 1916.

*Mild curing of salmon.*—The production of mild-cured salmon in 1917 showed a decline of about 30 per cent in quantity from that of

1916. This decline was due to a decrease in the number of king salmon taken and to an increased use of this species in the canning industry. The war has continued to close to this product what were formerly its principal markets. With the exception of a pack of 106 tierces of king salmon prepared in central Alaska, the mild-curing industry in 1917 was confined to southeast Alaska. The number of fixed plants operated was 10, the total value of the investment in the industry was \$940,937. The number of persons employed was 3,137. The total product of mild-cured salmon amounted to 3,563 tierces, or 2,850,400 pounds, valued at \$344,028. Of this output 2,937 tierces, valued at \$301,560, were prepared from king salmon.

*Pickling of salmon.*—The pickling of salmon was carried on to a greater extent in 1917 than in 1916. A total of 37 salteries were operated. The investment in the industry was \$865,442 and the number of persons employed was 509. The output consisted of 36,390 barrels, or 7,278,000 pounds, valued at \$590,497. In 1916 the output consisted of 17,734 barrels, valued at \$212,667.

*Other salmon industries in 1917.*—The output of frozen salmon in 1917 was 1,282,182 pounds, valued at \$81,574. In 1917 there were shipped from Alaska 3,559,785 pounds of fresh salmon, valued at \$304,048. In addition it is estimated that 1,000,000 pounds of fresh salmon, having a value of \$100,000, were consumed locally in the Territory.

Accurate statistics are not available with respect to the amount of salmon dry-salted, dried, and smoked. A great deal of salmon is prepared in one or another of these ways by Indians and others for strictly local use and for which no official reports are made. The aggregate amount actually reported was 377,000 pounds, valued at \$53,844.

There were manufactured from waste products of salmon 25,150 gallons of oil, valued at \$19,560, and 821 tons of fertilizer, valued at \$42,313.

#### HALIBUT.

Among the Alaska fisheries the halibut industry is second only to the salmon industry. In 1917 the investment in the halibut industry was \$2,200,987. In 1916 it was \$2,149,311, or \$51,676 less. The number of persons employed in 1917 was 909. The total production of halibut credited to the Territory was 13,153,411 pounds, valued at \$1,120,226, an increase of 1,657,854 pounds over that of 1916. Referring to the approximately 13,000,000 pounds credited to Alaska in 1917, it may be stated that the total catch of halibut on the Pacific coast was about 60,000,000 pounds, of which probably 30,000,000 were taken from the grounds contiguous to the coast of Alaska.

#### COD.

The quantity of cod taken in 1917 was less than in 1916, but the value of the catch was greater. The demand for Alaska cod in the West Indies was smaller than usual, with the result that new markets were developed in South America. A part of the cod products of Alaska was exported to the Hawaiian Islands and to Australia. A portion of the cod fishery is carried on by vessels operating from ports of the Pacific Coast States, while the balance is carried on

by means of shore stations in Alaska, where the fish are landed from vessels operating locally and prepared for market. The investment in 1917 in the cod fishery was \$1,408,265, which was \$844,053 greater than in 1916. The number of persons employed was 795, approximately the same as in 1916. The total production of prepared cod amounted to 13,777,470 pounds, valued at \$744,976. This production included 112,968 pounds of canned cod, valued at \$14,758.

#### HERRING.

In order to stimulate the production of herring in this country, not only to increase the aggregate amount of food but to meet the reduced supply due to the reduction in the amount of herring ordinarily received from abroad, and to place at the same time a better-prepared product upon the market, the Bureau of Fisheries initiated an educational campaign in the Territory in 1917. Stress was placed upon the Scotch-cure method. Directions were mailed to all persons known to be interested in Alaskan fisheries, and a corps of special assistants was placed in the field to give practical instruction to all who wished information. The bureau met with hearty cooperation on the part of those engaged in the fisheries, with the result that 1,877,450 pounds, or 7,622 barrels, were Scotch-cured in Alaska in 1917, as compared with 13,576 barrels packed by the Norwegian method. Special assistants as well as regular employees of the bureau continued this work in the season of 1918.

For food purposes Alaska herring are used fresh and are preserved by dry salting, freezing, pickling, canning, and smoking. For bait, herring are used fresh and after being frozen. Herring are also manufactured into oil and fertilizer. In 1917 the investment in the herring fishery was \$562,002, the number of persons engaged was 214, and the value of the products was \$767,729.

#### WHALES.

In 1917 the investment in the whaling fishery was \$1,609,926, or \$518,455 more than in 1916. There were 162 persons employed, or 71 fewer than in 1916. The value of the products was \$654,852, or \$291,131 greater than in 1916. The number of whales taken was 423, or 34 more than in 1916.

#### MINOR FISHERY PRODUCTS.

The clam-canning industry, represented by an investment of \$294,987, gave employment to 226 persons and produced products valued at \$274,036. The value of the trout products amounted to \$16,896. Shipments of sablefish from Alaskan waters amounted to 1,020,490 pounds, valued at \$38,303. The production of red rockfish amounted to 150,453 pounds, valued at \$3,696. Shrimps were pickled to the extent of 65,000 pounds, valued at \$3,400. Local use is made of crabs at various places, but the output reported was valued at only \$665. Their use should be increased. More attention should also be given to the development of the shark fishery. Shark hides may be made into a desirable grade of leather and the carcasses into oil and fertilizer. It is also stated that dried shark meat has a



value of from \$50 to \$60 per ton in sacks at Seattle. Among the species of fishes in the waters of Alaska which are utilized to a limited extent at present are the smelt, ling, eulachon, tomcod, flatfish, and atka fish.

#### FUR-SEAL SERVICE.

The act of Congress approved August 24, 1912, giving effect to the North Pacific Sealing Convention of July 7, 1911, provided that for a period of five years from its approval the killing of fur seals at the Pribilof Islands should be limited to the number required for the use of the native inhabitants. This five-year period expired August 24, 1917. However, the continuance of the so-called stagy season for a period of several weeks after August 24, when the seal-skins are not in good condition for commercial purposes, made it impracticable to resume commercial killings at once. Later in the year climatic conditions and the migration of the seals from the islands tend to restrict the killing of seals except upon a limited scale. Consequently, seals were not taken at any time in 1917 on the scale that the numerical strength of the herd would have permitted.

In the calendar year 1917 there were taken on St. Paul Island 4,986 sealskins and on St. George Island 3,184, a total for the Pribilof Islands of 8,170 skins.

Three sales of fur-seal skins from the Pribilofs were held at St. Louis in 1917. At the first sale, held in January, 2,000 were sold at an average price of \$46.84 per skin. The second sale was held in April, when 1,500 were sold, at an average price of \$45.69. In October 3,239 skins were sold, at an average price of \$33.17. The total number of skins sold in the year was, therefore, 6,739. All the skins were dressed, dyed, and machined before being sold.

Another census of the fur-seal herd was taken in 1917. The results showed a substantial increase in the size of the herd over the previous year, and were in keeping with the general upbuilding of the herd since the cessation of pelagic sealing several years ago as a result of the North Pacific Sealing Convention effective December 15, 1911.

The following table shows the results of the censuses taken in the years from 1912 to 1917, inclusive:

*General comparison of recent censuses of the seal herd.*

Class of seals.	1912	1913	1914	1915	1916	1917
Harem bulls.....	1,358	1,403	1,559	2,151	3,500	4,830
Breeding cows.....	81,984	92,269	93,250	103,527	116,977	128,024
Surplus bulls.....						8,977
Idle bulls.....	113	105	172	673	2,632	2,706
Young bulls (chiefly 5-year-olds).....	199	259	1,653			
Six-year-old males.....					11,167	15,397
Five-year-old males.....				11,271	15,494	14,813
Four-year-old males.....	100	2,000	9,939	15,848	15,427	16,631
Three-year-old males.....	2,000	10,000	13,880	18,282	19,402	19,307
Two-year-old males.....	11,000	15,000	17,422	23,990	24,169	26,815
Yearling males.....	13,000	20,000	23,068	30,307	33,645	38,013
Two-year-old cows.....	11,000	15,000	17,422	23,990	24,245	26,917
Yearling cows.....	13,000	20,000	23,067	30,306	33,646	38,018
Pups.....	81,984	92,269	93,250	103,527	116,977	128,024
<b>Total.....</b>	<b>215,738</b>	<b>268,305</b>	<b>294,687</b>	<b>363,872</b>	<b>417,281</b>	<b>468,662</b>

Each year the increase in the size of the herd brings about conditions which increase greatly the difficulties of obtaining the census. Owing to increased knowledge in regard to the herd which results in some rearrangement with respect to the various classes of animals composing the herd, to increased information in regard to death rates, changes which are brought about in the herd itself by reason of the relative increase in the number of males, and in lesser degree to other causes, the figures given for each class of animals are not entirely comparable from year to year. In all cases it is believed that the figures given are on the side of safety; that is, the herd is actually stronger, if anything, than the figures indicate.

In connection with the administration of the Pribilof Islands, the Department of Commerce attends to the management of the blue-fox herds on St. Paul and St. George Islands. As stated in the preceding annual report there were taken in the season of 1916-17 on St. Paul Island 150 blue-fox pelts and 37 white-fox pelts, and on St. George Island 417 blues and 2 whites, a total of 567 blues and 39 whites. These skins were sold in St. Louis in October, 1917. The 567 blue pelts sold for \$34,653.50 gross, an average of \$61.11 per skin, and the 39 white pelts for \$1,027 gross, an average of \$26.33 per skin.

In the season of 1917-18 there were taken on St. Paul Island 90 blue pelts and 14 white pelts, and on St. George Island 602 blue pelts and 5 white pelts, or a total for the Pribilofs of 692 blues and 19 whites. On the Pribilofs the white fox is a color phase of the normal blue fox, and its pelt is less valuable. All the foxes on the islands are of the same species, and efforts are made by the Government to reduce to a minimum the strain of white individuals.

In 1917 the shipment of bones of fur seals and sea lions which have accumulated on the Pribilof Islands was begun.

In anticipation of the taking of sealskins on a considerable scale in the calendar year 1918 the Department of Commerce has arranged for the construction and operation of a by-products plant on St. Paul Island, which will utilize the carcasses of seals resulting from the killings and which would otherwise be wasted. It is expected that fertilizer and oil will be the principal products.

#### MINOR FUR-BEARING ANIMALS.

Fur farming continues to receive attention in various parts of Alaska. Some operators are probably securing profitable returns from the business, while others are clinging to the work with a persistence which indicates a faith in the final outcome of their work.

The only change in the regulations of the Department of Commerce for the protection of the fur-bearing animals has been an extension ordered early in 1918 of the present complete prohibition on the taking of beavers for a further period of five years, or until November 1, 1923. This extension was made apparently with the general approval of the people of the Territory.

In the calendar year 1917 the time of a number of wardens was devoted largely to enforcing the laws and regulations for the protection of the fur-bearing animals. Other employees of the Bureau of Fisheries have given attention to this matter when practicable.

The collecting and compiling of statistics of shipments of furs from Alaska have been continued by the Bureau of Fisheries. All shippers are required by departmental regulation to report their shipments. The Post Office Department cooperates with the Department of Commerce in that it requires that postmasters see that a report is actually made with respect to each mail shipment. Through the courtesy of the collector of customs at Juneau the reports received of shipments made otherwise than by mail are checked with the records of his office. In 1917 the value of the furs shipped from Alaska, including those from the Pribilof Islands, was \$1,338,600, as compared with \$1,143,600 in 1916, and \$519,950 in 1915. The following table shows details with respect to quantity and value of furs shipped from Alaska in the period from November 16, 1916, to November 15, 1917. The figures for fur-seal skins from the Pribilofs are for the calendar year 1917.

*Furs shipped from Alaska in year ended Nov. 15, 1917.*

Species.	Number of pelts.	Average value.	Total value.
<b>Bear:</b>			
Black.....	1,061	\$14.00	\$14,854.00
Brown.....	62	12.00	744.00
Glacier.....	8	20.00	160.00
Grizzly.....	13	17.00	221.00
Polar.....	144	40.00	5,760.00
<b>Beaver.....</b>	118	10.00	1,180.00
<b>Ermine.....</b>	4,639	.90	4,175.10
<b>Fox:</b>			
Black.....	10	160.00	1,600.00
Blue.....	887	58.00	51,446.00
Blue, Pribilof Islands.....	567	61.11	34,653.50
Cross.....	2,660	35.00	93,415.00
Red.....	10,485	24.00	251,640.00
Silver gray.....	443	120.00	53,160.00
White.....	3,682	28.00	103,096.00
White, Pribilof Islands.....	39	26.33	1,027.00
<b>Hare, Arctic.....</b>	89	.40	35.60
<b>Lynx.....</b>	21,210	14.00	296,940.00
<b>Marten.....</b>	1,210	14.00	16,940.00
<b>Mink.....</b>	18,832	4.00	75,328.00
<b>Muskrat.....</b>	72,264	.45	32,518.80
<b>Otter:</b>			
Land.....	1,308	15.00	19,620.00
Sea.....	* 2	344.85	689.70
<b>Seal, fur, Pribilof Islands.....</b>	* 9,140	30.00	274,200.00
<b>Seal, fur.....</b>	* 5	30.00	150.00
<b>Squirrel.....</b>	117	.05	5.85
<b>Wolf.....</b>	195	8.00	1,560.00
<b>Wolverine.....</b>	435	8.00	3,480.00
<b>Total.....</b>			1,338,599.55

\* The killing of polar bears in Alaska is unlawful. Seventeen skins were reported as being taken in extra-territorial waters.

\* Includes 57 seized skins, and 46 reported as Canadian pelts. It is unlawful to kill beavers in Alaska.

\* Checked against affidavits that skins were taken before Mar. 15, 1916. It is now unlawful to kill martens in Alaska.

\* Unlawfully killed by natives.

\* Calendar year 1917.

\* It is unlawful to kill fur seals within the Territorial waters of Alaska, except on the Pribilof Islands.

#### THE LEASING OF ISLANDS FOR FUR FARMING.

The Department of Commerce has authority to lease certain Alaskan islands for fur-farming purposes. On June 30, 1918, the following islands were held under such leases: Middleton, in Gulf of Alaska; Simeonof, one of the Shumagin group; Little Koniuji, Shumagin group; and Pearl, one of the Chugach Islands.

## VISIT TO ALASKA OF THE SECRETARY OF COMMERCE.

Early in May of this year the Secretary of Commerce, as chairman of a joint American and Canadian commission, visited Ketchikan, at which time a number of matters appertaining to local conditions were brought to his attention. Accompanying the Secretary were the Assistant Secretary of Commerce and the Director of the Bureau of Fisheries. The result of this visit was most gratifying, as is shown by a letter from the Secretary of Commerce, which I quote in full:

I was very glad indeed to have your letter of the 4th instant, and am led by it to write you concerning such of the plans of this department for work in Alaska as can at this time be formulated.

It will doubtless be well to begin by saying that, in view of your interest in the work of demonstrating to the people of Alaska the best methods of curing and packing and otherwise preparing for market the invaluable fish food resources of that Territory, we have determined to double the number of expert demonstrators from the Bureau of Fisheries, sending four instead of two.

Deeds speak louder than words, and the earnest wish of the Department of Commerce to assist Alaska rests upon definite performance in the present and the past, rather than upon promises for the future.

Three of the maritime services of this department affect Alaska—the Lighthouse Service, the Coast and Geodetic Survey, and the Bureau of Fisheries. The equipment of these services has long been inadequate for the important and growing work that Alaska requires. Therefore, in each of the three new vessels have been specially designed for the Alaskan service and constructed or else have been purchased, so that in each of these three lines of effort the best ships the department has throughout the entire United States are those either stationed in or specially intended for the work in Alaska. In the Fisheries Service the lighthouse steamer *Cedar* is the largest we have. The new surveying steamer *Surveyor*, specially designed for work upon Alaskan coast, will be sent there as soon as the exigencies of war relax so that she can be spared from the Navy. In like manner the steamer *Roosevelt*, of the fisheries service, specially constructed for ice conditions, is not only peculiarly fitted for Alaskan work, but has proved that fitness within recent weeks by the rescue of the icebound ships and crews in Bristol Bay, in which single operation she more than paid her entire cost and maintenance up to date.

While on this particular theme it should be added that appropriations have just been made providing a power lighter for use between Alaskan points and the seal islands in the fisheries service; for a small new steamer to take the place of the *Taku* for surveying in Alaskan waters and for wire-drag launches for the Coast and Geodetic Survey, the first step toward an adequate provision of those important little vessels to do in the best and most rapid way that kind of surveying of which the coast of Alaska stands in peculiar need.

At the same time provision is made for extending the seacoast lights in Alaska, and I hope before this letter reaches you to learn that Congress has provided a fund of \$80,000 for constructing at Ketchikan a modern lighthouse depot, adequate for the home station of that service for the entire Alaskan coast. I took pleasure in personally appearing before the Senate committee and asking that this matter be expedited.

I have recently caused inquiries to be made in Ketchikan as to whether the wooden steam lighter for the fisheries service could be built at some Alaskan point, and regret to find that there seems no yard adequate for the purpose. Let me suggest that a good boat-building yard would seem to have an excellent opportunity at some Alaskan port. There is, I take it, abundant material, and the amount of labor would not be large. If such a yard existed now we could give it an opportunity to bid upon four small wooden vessels, and this is, I think, likely to recur from time to time. We shall ask Congress for four more launches, in addition to the four now granted, and of these two more could be built in Alaska.

Furthermore, there are so many fishing vessels of moderate size along the Alaskan shore that there must be a steady demand for boat repairs, and it would seem that a moderate-sized yard could keep busy pretty steadily. On the other hand, it would greatly facilitate the fisheries work in Alaska if the fishermen were able to get boat repairs, and possibly minor repairs on vessels,

made promptly. A small ship railway would be a valuable addition. We would willingly encourage such a yard by giving it such business as we had.

As you know, the Steamboat Inspection Service district in which Alaska is included covers also the entire Pacific coast of the continental United States and Hawaii as well, with headquarters at San Francisco. This is an impossible situation which we have long striven to change. Legislation is now pending at our request which will put California and Hawaii into one district and establish a new one, with headquarters at Portland or Seattle, to include Alaska. The result will be a much closer supervision over matters within the review of this service through the ability to give more detailed care to the work of the local boards at St. Michael and Juneau.

Passing to matters of future policy, we intend to actively continue the work of improving the physical condition of streams so that spawning salmon may find their way upward and young salmon may pass downward. By dynamiting obstructions a considerable number of streams now altogether or partly devoid of salmon runs may be made suitable for particular species and the production of salmon in certain regions can be thereby materially increased.

The Bureau of Fisheries is now in position to carry out for the first time the special patrol of salmon streams, a matter which has been advocated from time to time by people in Alaska. This year about 20 of the principal streams will be under the constant supervision of watchmen to see that the fishery laws are enforced and to report on fishery conditions. Each of these patrols will have a motor boat and the service will, if it proves satisfactory this season, be extended and made permanent.

The plans of the Bureau of Fisheries for salmon culture in Alaska include:

(a) Additional hatcheries in the regions of the most exhausting fisheries.  
(b) Acquisition of the present private hatcheries and the operation as Government plants of those that are able to render good service.

(c) Perfection of methods and extension of rearing facilities so that the salmon hatched may be reared to a suitable age before release.

The fisheries service is undertaking this year a special investigation of the salmon resources of the Yukon and Copper Rivers, with particular reference to the conservation of the supply. There is also in progress a scientific investigation of salmon looking to the solution of some important practical questions that have arisen in the administration of the salmon laws. This work is in charge of Dr. Charles H. Gilbert, who is the leading authority on the Pacific salmon.

It is the earnest hope of the department to establish on the northwest coast of the United States a fisheries experiment station to serve the same function to the fishing industry that an agricultural experiment station serves to agriculture. Such a station, if located on Puget Sound, would be expected to meet in large measure the immediate needs of Alaska. If, however, it were found after experience that Alaska's interests in this respect could be more adequately served by a station within her own territory, the Bureau of Fisheries would be ready to submit an estimate for such an additional station to Congress.

It is the earnest desire and intention of the fisheries service to extend what is known as the fisheries intelligence service so as to make it more useful to all the fishermen of Alaska. At present this intelligence service comprises market quotations on certain fishes at Seattle, which quotations are daily wired to Ketchikan, from which point there is a daily telegraphic market report to Juneau; Wrangell, Petersburg, Skagway, Cordova, Valdez, Seward, and Sitka. This service was instituted in response to a memorial of the Alaska Legislature and is maintained without expense to the Territory.

The rich aquatic resources of Alaska have not heretofore received the attention they deserve. One or two fisheries of great importance have overshadowed others. Yet these more or less neglected fishes are valuable food products and are the very ones which have made other countries prosperous. Particular stress is now being laid, as you know, by the Bureau of Fisheries on the salting of herring after the Scotch method and the curing of atka fish and others. There can be no doubt that with proper publicity and instruction the Alaska herring industry can be made to rival that of Norway and Scotland and this department is definitely committed to the task of bringing this to pass. We have undertaken a campaign to introduce into wider popular use the valuable food fishes of Alaska hitherto largely neglected. We regard it as certain that there will come in time to be an economic importance to these almost unused fish foods which will greatly contribute to the wealth of Alaska.

Coincident with the resumption of commercial sealing on the Pribilof Islands, the department for the first time in the history of those islands is making use of the by-products of the sealing industry. A reduction plant has been sent to the islands, and there will henceforth be a large and valuable output of oil and fertilizer. These are both in great demand and will never again be utterly wasted as in the past. A number of Alaskans have been taken to the seal islands for temporary employment during the height of the present season.

In my recent visit to the Pacific northwest it was more than once suggested as a hope that the coast of Alaska might be dotted with fishing villages, each pursuing a prosperous local industry and each contributing to the Nation's food supply and wealth. It is our earnest hope that this may come to pass, and the Department of Commerce will willingly lend its efforts to bring this about.

The department realizes, however, that no country can safely depend permanently upon any one single overshadowing industry or occupation. In diversity lies security. Every interest in Alaska should have the fostering care of the country so that its development may be rounded and not partial. Before the shores of Alaska, however, can be covered as they ought to be with the vessels bringing to and from her ports the commerce that is their due, the waters of Alaska must be made safe, and this means that the surveys of many straits and arm must be worked out so that the navigator shall know how to avoid the perils that now threaten him. To this important task the services of the Coast and Geodetic Survey shall be continuously devoted. It is a pleasure, therefore, to know that pending legislation carries an appropriation for another fine surveying steamer similar to but possibly an improvement upon the *Surveyor*, which vessels we hope may contribute to safeguarding the Alaskan shores.

#### TERRITORIAL FISH COMMISSION.

A Territorial fish commission was provided for under chapter 75 of the session laws 1917, entitled "An act providing for fish hatcheries and for the protection and care of natural spawning grounds in the Territory of Alaska, and for the creation of a board of fish commissioners." Eighty thousand dollars was appropriated to carry out the terms of the act.

Irregularities in the passage of the law were brought to my notice by the treasurer and the attorney general of the Territory. Grave doubts were expressed by both if the funds appropriated could be legally expended. Reluctantly I was forced to relinquish my desire to carry in effect the intent of the law which would undoubtedly have been of great benefit to the Territory. The activities contemplated would have been of unquestioned value in supplementing the valuable work of the Bureau of Fisheries, for which entirely inadequate provision has been made.

#### EXPERIMENTAL HATCHERY.

With assistance from Territorial funds the Alaska Fish and Game Club has maintained a small experimental fish hatchery at Juneau with most interesting and valuable results. The original intention of the club was to stock barren waters with fish to provide sport for resident anglers; later, however, the idea expanded to include experimentation along original lines. The work of the club has been briefly as follows:

In January, 1917, the two allotments of trout eggs in the "eyed" state, amounting to more than 150,000, were received from the Bureau of Fisheries and placed in the hatchery. In due time they were hatched with less than 10 per cent loss.

On account of a very late spring, the planting of the fry could not be accomplished as early as desired and the expense of feeding was

incurred. They grew well and between the period from hatching to planting there was practically no loss.

On June 1, 1917, 40,000 fry were planted in Lower Annex Lake; June 11, 50,000 were placed above Salmon Creek dam; June 25, 50,000 were put in Upper Annex Lake, all in the vicinity of Juneau, and on July 4, 15,000 were planted in Lake Dewey and contiguous lakes and ponds at Skagway.

Thirty days after planting, the fish had increased more than three times their size; by the end of August they were over 4 inches long; at the close of the season specimens were seen measuring 6 inches, and as soon as the lakes opened in June, 1918, some were taken with a fly measuring 6 to 8 inches. Live specimens are now at the hatchery and are in fine condition. The eggs from which these fish were hatched came from a Colorado hatchery of the Bureau of Fisheries and are of the variety known as the Eastern Brook, a species of char.

So well did the experiment prove that in July, 1917, the club asked the Bureau of Fisheries for an allotment of 100,000 "eyed" eggs of the Rocky Mountain black spotted trout. This request was put through the Delegate and in due time the eggs were shipped from the Yellowstone Park hatcheries, but owing to poor packing and improper attention en route the shipment was lost.

Application was then made for 200,000 Eastern Brook eggs, which were received January 21, 1918, in good condition, in due time successfully hatched, and are now in course of distribution. Thus far the following plants have been made:

Lakes near Nickle, Chichagof Island.....	15,000
Wagner Dam and Salmon Creek, Juneau.....	20,000
Upper Sheep Creek, Juneau.....	20,000
Upper Lemon Creek, Juneau.....	20,000
Lund Lake, Juneau.....	15,000
Boston Pond, Juneau.....	2,000
Granit Creek, Juneau.....	15,000
Lakes near Cordova.....	10,000

There are also about 40,000 native Cut-Throat Trout fry, hatched during the winter at the hatchery awaiting distribution.

Besides the trout work mentioned, the club took up the matter of placing shad in the Taku River, but failed to secure any roe from the bureau.

By far the most important work done by the club is its experimenting with salmon propagation which has been carried on at the hatchery and in appropriate streams. Particular attention is called to the following experiments which have been conducted during the last two years, from which satisfactory results have been obtained:

1. Stripping the parent fish at the spawning beds and, after fertilization artificially, planting the eggs in the sand or gravel to conform with natural hatching.
2. Holding fertilized eggs in the hatchery to within 24 to 72 hours of the hatching stage and then planting same in inlet streams of barren lake or body of water free from all other fish life or natural enemies.
3. The cleaning out of all natural salmon-producing streams of debris and obstruction and erecting ladders over barriers.

An interesting experiment is in progress in a small way, which has shown remarkable results. On September 21, 1917, eggs in the roe and upripe milt were taken from under the "iron chink" at the

Chilkoot cannery after the parent fish had been dead from 12 to 24 hours and handled in the usual manner. The eggs were subjected to the fertilization by the milt artificially and placed in the troughs. After a lapse of 120 days a result of 5 per cent of normal fish was obtained.

#### MINERAL PRODUCTION OF ALASKA.

In 1917 Alaska produced minerals valued at \$40,700,195. The value of the mineral output of Alaska in 1917, although about \$7,931,943 less than that in 1916, was greater than that in any other year. The most valuable mineral product in 1917 was copper, of which 88,793,400 pounds, valued at \$24,240,596, was produced. This is less than the output of 1916, which was 119,602,028 pounds, valued at \$29,480,291, but is greater than that of any other year. The reduction is due largely to labor troubles and is not necessarily permanent. The gold produced in 1917, \$14,657,353, of which \$9,810,000 was derived from placer mines, was also less than that produced in 1916, which was \$17,241,713, and is the smallest since 1904. The reduction was due chiefly to curtailment of operations because of the scarcity of labor and the high cost of materials, but in part to the disaster at the Treadwell mine and the depletion of some of the richer placers.

During the year Alaska also produced silver valued at \$1,021,055, coal valued at \$265,317, lead valued at \$146,584, tin valued at \$123,300, antimony valued at \$28,000, and tungsten, chromium, petroleum, marble, gypsum, graphite, and platinum valued at \$217,990.

Since 1880 Alaska has produced \$390,286,124 in gold, silver, copper, and other minerals. Of this amount \$292,758,000 represents the value of the gold, and that \$88,644,468 that of the copper.

#### MINING IN ALASKA.

[Advance statement by United States Geological Survey.]

##### GOLD PLACER MINING.

The data in hand indicate that the value of the placer gold output in 1917 was \$9,810,000, in 1916 it was \$11,140,000. The decrease was due chiefly to restriction of operations because of the high cost of supplies and the scarcity of labor. The placer output was increased only in the Tolovana, Marshall, and Ruby districts, and at the new camp at Tolstoi.

##### GOLD LODE MINING.

Thirty-one gold-love mines were operated in 1917, compared with 29 in 1916. The value of this lode gold mined decreased from \$5,912,736 in 1916 to about \$4,581,453 in 1917. The decrease was due chiefly to the disaster at the Treadwell mine. Southeastern Alaska, especially the Juneau district, is still the only center of large quartz-mining development in the territory. Next in importance is the Willow Creek lode district. Gold-love mining on Prince William Sound, Kenai Peninsula, and in the Fairbanks district is at a standstill.



## COPPER MINING.

The copper production of Alaska in 1917 was about 88,793,400 pounds, valued at about \$24,240,596. This is less than the production in 1916, which was 119,854,839 pounds, valued at \$29,484,291, but is greater than the production of any other year. The reduction in output was due largely to labor troubles at the Kennecott-Bonanza mine. During the year 17 copper mines were operated, compared with 18 in 1916—7 in the Ketchikan district, 7 in the Prince William Sound district, and 3 in the Chitina district. The enormous output of the Kennecott-Bonanza mine, in the Chitina district in 1917 as in previous years, overshadowed that from all others.

## TIN MINING.

About 100 tons of stream tin was produced in Alaska in 1917, valued at \$123,300. Most of this came from the York district, where two tin dredges were operated. Developments were also continued on the Lost River lode-tin mine. The rest of the concentrates were recovered incidentally to placer-gold mining, chiefly in the Hot Springs district.

## ANTIMONY MINING.

The mining of antimony ore (stibnite) began in Alaska in 1915 and continued on about the same scale throughout the first half of 1916, when a fall in the price of antimony put an end to most of these operations. Mining continued at two localities in the Fairbanks district in 1917.

## TUNGSTEN MINING.

The Fairbanks district and Seward Peninsula were the principal producers of tungsten in Alaska in 1917. In the Fairbanks district two tungsten mines are in course of development. At one of these mines one unit of a 75-ton mill is in operation and late in the summer was turning out several hundred pounds of scheelite concentrates daily. At the other mine a similar mill was in course of construction. Underground work was in progress at both mines. The present indications give promise of a large increase in the production of tungsten in the Fairbanks district. In Seward Peninsula tungsten was produced principally by sluicing the residual scheelite-bearing lode material in Sophie Gulch. Smaller quantities were recovered as the result of placer mining at other localities.

## MINERAL FUELS.

The production of petroleum from the only oil claim patented in Alaska, in the Katalla district, was increased somewhat in 1917. Drilling continued on a small scale, but no new productive wells were obtained.

Fifty-three thousand nine hundred and fifty-five tons of coal, valued at \$265,317, were mined in Alaska during 1917. The largest production was derived from the Eska Creek mines in the Matanuska field, which were taken over by the Alaskan Engineering Commission. Coal was mined also at the Doherty mine in the Matanuska field, at

the Bluff Point mine on Cook Inlet, on Cache Creek, and near Candle. The most important event of the year in connection with coal mining was the completion of the Matanuska branch of the Government railroad. The high-grade coal on Chickaloon River is now being opened by the Alaskan Engineering Commission, and small shipments to anchorage have been reported. Work preparatory to mining is being undertaken by private lessees on Moose Creek.

The coal lands in the Nenana coal field have been subdivided and will be offered for leasing at an early date. The Government railroad is now being built southward to this field from Nenana, on the Tanana River, and will probably reach the field and make the coal available for river shipment in the summer of 1918. A private railroad from Controller Bay to a patented coal claim in the eastern end of the Bering River field is now under construction and reported to be nearing completion.

#### REVIEW BY DISTRICTS.

##### SOUTHEASTERN ALASKA.

About 10 gold-lode mines, 8 copper mines, 3 placer mines, 1 gypsum mine, and 1 marble quarry were operated in southeastern Alaska during 1917. The value of the gold produced in this field was about \$4,325,251. Copper production from this region (all of it from the Ketchikan district) was 2,646,553 pounds, valued at \$721,686. Silver value \$123,825; lead, marble, gypsum, etc., \$236,317; total mineral production southeastern Alaska \$5,407,079 for 1917.

In the Ketchikan district no gold mines were operated. The principal copper producers were the Rush and Brown, It, Jumbo, and Mount Andrew mines. The Mamie mine was closed down in the spring and an increased output was made at the It. The Rich Hill copper property, on Kasaan Peninsula, is being developed by the Granby Co. A 60-ton flotation mill was constructed on the Salt Chuck mine (formerly the Goodro mine), where milling was begun late in the summer. A molybdenite-bearing lode in the vicinity of Shakan, on the west coast of Prince of Wales Island, is being developed. Marble quarrying at Tokeen was continued about as usual.

Development of the copper lodes of the Ketchikan district, particularly on Kasaan Peninsula, has led to the uncovering of large bodies of magnetic iron ore at a number of places. The magnetite, which contains usually about 0.5 per cent of copper, has hitherto been regarded only as a low-grade copper ore. Attention has recently been redirected to these ores as a source of iron. Magnetic separation should yield a high-grade iron ore and a valuable by-product of chalcopyrite to pay for the cost of separation. Plans for utilizing these iron ores are now being considered.

Gold-lode mining on a large scale continued at the Alaska-Juneau and Alaska-Gastineau (Perseverance) mines, near Juneau, in 1917. The new mill at the Alaska-Juneau mine was completed and put in operation in April, and was being run at about half its full capacity of 8,000 tons daily in October. The Alaska-Gastineau mine and mill were turning out 7,500 tons daily in October.

As a result of a cave-in at the Treadwell, 700 Foot, and Mexican mines, which occurred in April, these properties are now flooded with sea water and abandoned. The surface equipment of these three mines is being dismantled and sold.

The Ready Bullion mine, though connected at the 1,350-foot level with the Mexican mine, was saved by a concrete bulkhead, which, after the cave-in, was made permanent and greatly strengthened. At the end of June the drawing of all broken and caved ore above the 2,000-foot level was discontinued in order to render the mine entirely safe, and all open stopes are now being filled with waste. Development of the mine continued in the lower levels. The 2,400-foot level is now completed, and rapid progress is being made in the 2,600-foot level. The present plans contemplate the ultimate extension of the new No. 2 shaft to the 4,200-foot level. The production of gold at the Ready Bullion mine was decreased to one-third the normal quantity when work above the 2,000-foot level was discontinued, but will gradually be increased as the lower levels are opened up.

Development work was continued at the Alaska-Ebner mine. The Jualin mine, at Berners Bay, was operated at the rate of 35 tons a day during most of the year. Other properties in the Juneau gold belt were also developed or operated in a small way, and a prospecting for new lodes was continued.

Development work continued at the molybdenite prospect, 9 miles north of Skagway.

On Chichagof Island both the Chichagof gold mine and the gypsum mine of the Pacific Coast Gypsum Co. were operated on about the same scale as last year. The main tunnel of the Chichagof mine is now over 4,400 feet long. At the gypsum mine work was started on the new 300-foot level. This mine has been a steady producer since 1906.

Development work was continued on the group of copper claims near the head of Pinta Bay, about 15 miles northwest of Chichagof. A little prospecting, but no underground development work, was done on the copper-nickel deposit at Nickel, about 22 miles northwest of Chichagof.

#### COPPER RIVER BASIN.

The largest mineral producers of the Copper River region, in 1917, as in the several preceding years, were the Jumbo and Kennecott-Bonanza copper mines. Considerable copper was also shipped from the Mother Lode mine, and small shipments were made from several other properties. The important local developments in copper mining during the year include the successful operation of an ammonia leaching plant installed at the Kennecott-Bonanza in 1916 and the construction of automobile roads for hauling ore from the Mother Lode mine and from Nugget Creek. Much development work was done at these and other mines, some of which will probably soon be shipping. Labor troubles reduced the output of the Jumbo and Kennecott-Bonanza mines during the summer. Hydraulic placer mining continued on a large scale in the Nizina and Chistochina districts. Some platinum was produced in the Chistochina district.

## PRINCE WILLIAM SOUND.

The value of the total mineral production of Prince William Sound was \$4,567,929 in 1917, as compared with about \$3,000,000 in 1916. This represents the value of the production of 7 copper mines and 3 gold mines which can be classed as regular producers, and 8 other small mines or prospects.

The producing copper mines in 1917 included the Beatson, Blackbird, Schlosser property, Midas, Mackintosh property, and Ellamar. The Blackbird group, on Latouche Island, began shipping after lying dormant for several years. Three hundred and fifty men were employed at the Beatson-Bonanza, where large operations were continued and the capacity of the milling plant was increased to 1,600 tons a day. Twenty-five men were employed on the Blackbird and a new ore body was opened up. Twenty-seven men were employed on the Schlosser property and considerable underground work was done. The Mackintosh property employed 13 men stoping an old lead and extending the adit tunnels on it and cross-cutting to a new lead. The Ellamar mine, with 100 men, continued operations throughout the year on about the usual scale. Fifty men were employed at the Midas during the year, underground operations were continued, a tram was operated, and large shipments were made. Six hundred feet of tunnel and crosscuts were driven on the Rua property. A large low-grade copper property was discovered on Long Bay. Some diamond drilling on a nickeliferous deposit on Knight Island is reported.

Four small gold mines were operated in the Port Valdez and Port Wells districts, but there was a gradual decline in gold mining and milling throughout the year, and the total production of the gold mines was small.

## KENAI PENINSULA AND COOK INLET.

The lode and placer gold mines of Kenai Peninsula yielded a smaller output than in the previous year. There was very little activity in the lode mines. The largest placer operations were on Resurrection and Crow Creeks. Preliminary steps were taken toward placer mining on a large scale on Canyon Creek. Large shipments of chromic iron ore were made from Port Chatham. Mineral production for 1917 was about \$30,000 of placer gold and \$4,600 of lode gold.

## MATANUSKA COAL FIELD.

The most important event of the year in the Matanuska Valley was the extension of the railroad to Chickaloon, completing the Matanuska branch. The Eskra Creek coal mines, opened in 1916 by private lessees, have been taken over by the Alaskan Engineering Commission, which is also opening a mine at Chickaloon. The Doherty coal mine, on Moose Creek, was operated throughout the year, and work preparatory to mining was undertaken at other localities.

## SUSITNA REGION.

In the Willow Creek district 5 lode mines were operated in 1917 and produced \$195,662 in gold and \$586 in silver. A promising new

quartz vein was opened at the head of Fishhook Creek and has already been traced for several claim lengths.

In 1916 and 1917 some 20 groups of claims were staked on gold and copper-bearing lodes in the basin of Iron Creek, a tributary of Talkeetna River from the southeast, but practically no underground work has yet been done. The discovery of a large dike carrying gold is reported from upper Talkeetna River. Some massive bornite that carried visible free gold and that was reported to have been found in the basin of Kashwitna River was brought in by a party of prospectors.

The prescribed amount of annual assessment work was performed on about a dozen groups of lode claims in the upper basin of Chulitna River, often referred to as the Broad Pass district. No mines in this district are yet productive, but more vigorous exploitation of the gold, copper, and antimony deposits awaits the better transportation that will be furnished by the Government railroad.

The Cache Creek district continued to be the principal source of placer gold in the Yentna basin. The inaccessibility of placers on Cache Creek has made mining there very expensive, but a new wagon road from Talkeetna, on the Government railroad, to Cache Creek, which is now under construction, will soon afford a quick and easy approach to the district. A dredge, burning local coal, was operated on Cache Creek, and 15 hydraulic plants were working on Cache and Peters Creeks during the summer. Over 100 men were employed, producing placer gold valued at between \$125,000 and \$150,000. Operations at the end of the season were hampered by protracted rains and serious floods, which caused considerable damage to several mining plants. Late in the fall a Hudson Dry dredge was installed on ground along the north side of Kichatna River, at the mouth of Nakochna River, to begin mining in the spring of 1918. Some prospecting and mining were done in the Camp and Lake Creek Basins. Along the lower Kahiltna River prospecting for platinum was carried on by one company at two localities—one about 3 miles below the mouth of Peters Creek and the other a short distance upstream from the mouth of the river. A hand drill and two power drills were used in prospecting the river bars, about 12 men having been employed in this work. The prospecting is to be continued next season.

Platinum occurs at many other places in the Susitna Basin, including Cache, Peters, Camp, and Lake Creeks, as well as on the Kichatna and Chulitna Rivers, and commercial platinum placers may ultimately be found.

#### SOUTHWESTERN ALASKA.

There was no mineral production in Southwestern Alaska except a small amount of placer gold taken from the Kodiak beaches and from a creek near Katmai.

#### YUKON BASIN.

The Alaska camps of the Yukon Basin are believed to have produced \$6,583,000 worth of gold in 1917, about \$1,000,000 less than in 1916. An estimate of the output of the principal camps is as follows:

*Estimated value of gold produced from principal placer districts in Yukon Basin in 1917.*

Iditarod	\$1,500,000
Fairbanks	1,310,000
Tolovana	1,150,000
Ruby	885,000
Hot Springs	450,000
Marshall	425,000
Koyukuk	250,000
Circle	200,000
All others	413,000

In addition to placer gold the Fairbanks district produced lode gold, silver, lead, antimony, and tungsten. The most noteworthy feature of the placer mining of the year was the increased output of the Tolovana placers. There was also an increased production in the Marshall and Tolstoi and probably in the Ruby district. The other districts show a decreased output, due chiefly to a general retrenchment by operators because of the high cost of supplies and the scarcity of labor. It is reported that a large dredge will be installed on upper Fairbanks Creek to begin operations in 1918.

Gold lode mining in the Fairbanks district has been on the decline since 1913 and is now practically at a standstill. The cost of supplies and fuel has become so high that many operators will wait for more favorable conditions rather than work at a low profit and run the risk of actual loss. Eight gold lode mines were worked in a small way and five of these operated their own mills. One silver-lead deposit is being worked and made an output. One antimony mine was in operation and some ore was hand picked from old tailings and shipped. Two tungsten mines are in process of development. One is in operation and during the fall produced 500 pounds of scheelite concentrates a day. On the other the mill is in course of construction and surface and underground development work is in progress.

The gold production of the Hot Springs district is estimated to be \$450,000. The tin production is estimated at 25 tons. The decrease in the production of both gold and tin is due in part to the cessation of large operations on Woodchopper Creek and in part to the high cost of food and of mining supplies, which have prevented the working of any except high-grade ground. Although the tin output was small, there appears to be a considerable amount of stream tin in the old tailings and in the unworked ground. Prospecting in 1917 showed that both gold and stream tin occur in the basin of Sullivan Creek, considerably below the area which has not yet been mined, and that large bodies of low-grade gravels occur on Boulder Creek.

Operations in the Ruby district were conducted on about the same scale as in 1916. Prospecting on Midnight Creek has shown the presence of tin at several places. The dredge on Greenstone Creek had a successful season, but the dredging ground has been worked out and the dredge will be moved. Good ground was discovered by winter prospecting on Ketchum Creek, but the ground is too deep for easy exploitation. Twenty-one outfits and about 180 men were at work during the summer. Several winter dumps were taken out.

In the winter of 1916-17 a stampede to Tolstoi occurred, there being at times as many as 400 men at that camp, and there was much prospecting during the winter and spring. Not over 50 men were there in July. About \$50,000 was taken out during the winter and summer in the Tolstoi district, the result of the operations of about 25 men on 5 plants, most of the production being made by one outfit on Boob Creek. Boob Creek is the only creek from which there was any production of platinum. It was not separated from the gold, but was sold with it to a bank in Iditarod. The platinum in the gold was said to amount to about 1 per cent, which would make approximately 30 ounces of platinum produced.

About 22 plants, employing 130 men, were working in the Ophir district.

The production at Marshall was about \$425,000, as compared with \$270,000 in 1916, mostly from 5 plants on Willow Creek, employing about 200 men, but some smaller plants were at work on Willow, Disappointment, and Elephant Creeks. A small amount of platinum occurs with the gold on some of the creeks at Marshall.

A strike is said to have been made on Anvik River by two men. Platinum is reported in association with the gold.

#### KUSKOKWIM BASIN.

Only scanty data are at hand concerning mining in the Kuskokwim Basin. Production was limited, as usual, to the placers, and apparently was on about the usual scale. A dredge will begin operations at the upper end of Candle Creek in 1918. A new strike is reported on the divide between Nixon Creek and the North Fork of the Kuskokwim. Production in 1917 was about \$135,000.

#### SEWARD PENINSULA.

The value of the gold output of Seward Peninsula in 1917 was about \$2,600,000, which is somewhat less than that of 1916. In addition to this, stream tin, tungsten, and graphite were produced.

Gold production on Dime Creek was greater than the preceding year, six plants making a very large part of the \$150,000 produced by deep mining during late winter and early spring. An additional \$20,000 will about cover summer production, mostly from 3 open cuts. The platinum content of the gold is about 1 ounce to \$5,000, on the lower claims of the creek and on bench claims. It is somewhat higher on claims near the head of the creek. The platinum production amounted to about 35 ounces. In all, 17 plants worked during the winter and summer, employing about 85 men. This mining was done on 4 claims, but on other claims there was prospecting or setting up of plants for winter work. A number of men were engaged in this work for short periods during the summer, as well as in constructing ditches and in sluicing winter dumps.

About \$10,000 was produced on Sweepstakes Creek, between Bear Creek and Dime Creek, by 4 plants employing 11 men. This gold also contains a small amount of platinum, about an ounce having been separated from the gold.

The gold production from Bear Creek is not known. Four outfits, employing 14 men, worked during the season. Some prospecting also

was done on this creek. A few pennyweights of platinum were produced.

Approximately 750 men were employed in placer mining in Seward Peninsula, exclusive of those employed on dredges. They worked with 170 plants. About half the men were employed in the Nome and Council precincts.

Exclusive of dredge production, the gold produced from the Port Clarence precinct is estimated at \$27,000. That from the Kougareck precinct, likewise exclusive of dredge production, is estimated at \$55,000.

Lode-mining developments for the year consisted for the most part of little more than the necessary assessment work. The high prices of lead and silver gave an impetus to the search for those metals in the vicinity of Lost River and on the Kugruk, considerable work having been done on some properties in both localities. A mill was set up on a gold-lode property near Bluff.

Twenty-eight gold dredges were operated on the peninsula in 1917—7 in the Nome district, 5 in the Solomon River district, 10 in the Council district, 2 in the Port Clarence district, 2 in the Fairhaven district, and 2 in the Kougarek district.

During the summer two tin dredges were in operation in the York region—one on Buck Creek, the other on Grouse Creek below the mouth of Buck. In addition to the tin won by the dredges, about 6 tons of placer tin was sluiced by two men working on Iron Creek, which flows into Sutter Creek, a tributary of Buck Creek. One of the dredges was prospecting for future dredging ground, as the next season will finish up their present ground. Unusually heavy rains during the last week in August delayed the work of both dredges. About 25 men were engaged in the placer mining of tin.

Some development work was done on tin-lode claims at the head of Buck Creek, Tin City, Lost River, and Ear Mountain. No ore was milled or shipped from any of these properties.

Most of the tungsten ore (scheelite) produced in 1917, as in 1916, came from Sophie Gulch. A few pounds was saved as the result of smaller placer operations on one of the small tributaries of Snake River, below Glacier Creek, and a small production was made on Sunset Creek in the Port Clarence district.

Work was done on two graphite properties during the summer of 1917. On one of these it consisted only of assessment work. On the other property about 4 miles of road were constructed from the property to Graphite Bay, an arm of Imuruk Basin. Some graphite was mined and was shipped to Graphite Bay by a gasoline tractor.

#### KOBUK RIVER.

During the year about 20 men were mining on Kobuk River, but they took out grubstakes only. The production of the district was probably about \$25,000. The ground is worked by open cut in summer, the deeper spots being worked in winter. Most of the mining is done on Klery Creek. One outfit was prospecting on Ambler River and another on the Noatak. It is reported that a strike was made at Walker Lake during the summer and that 4 or 5 men were rocking out \$10 to \$15 a day.



## NATIONAL FORESTS.

The total receipts of the Tongass and Chugach National Forests for the fiscal year ended June 30, 1918, were \$96,939.07. The total cost of administration on the two forests for the same period was \$54,411.67.

The total number of applications received for homesteads on the Tongass National Forest under the act of June 11, 1906, is 237; of this number 17 were received during the last fiscal year. The total number of applications received for homesteads on the Chugach National Forest is 405; of this number 18 were received during the last fiscal year. Patent survey is made by the Forest Service free of charge for all national forest homesteads just as soon as the applicant has complied with the law with respect to residence and has made a reasonable effort in cultivation.

On June 1, 1918, an agricultural reconnaissance was begun on the Tongass National Forest, for the purpose of locating all tracts of agricultural land suitable for homestead units.

The total number of occupancy permits on the Tongass National Forest is 535; of these 211 were issued during the fiscal year 1918. The total number of occupancy permits on the Chugach National Forest is 180; of these 25 were issued during the fiscal year 1918.

There were 498 timber sales made on the Tongass and Chugach National Forests during the last fiscal year, 113 of these being on the Chugach. The total amount of timber cut on the Tongass National Forest for the fiscal year ended June 30, 1918, was as follows:

Saw timber.....	board feet.....	24,841,029
Piling.....	linear feet.....	2,923,466
Cordwood.....	cords.....	1,395

Total in board feet, 41,157,012.

*Chugach National Forest.*

Saw timber.....	board feet.....	3,343,567
Piling.....	linear feet.....	853,857
Cordwood.....	cords.....	1,650

Total in board feet, 6,744,698.

In addition to the above approximately 6,000,000 board feet was cut under free use for the Alaskan Engineering Commission, and considerable free use was also granted on the Tongass.

A timber cruiser with a small launch is spending the entire summer on the west coast of Prince of Wales Island and adjacent islands looking up stands of spruce suitable for airplane lumber. Special effort was made during the last fiscal year and is now being made to get out all the airplane lumber possible.

Improvement work in trail and road construction was continued during the fiscal year on the Stikine River and at Warm Springs Bay.

The Forest Service, in cooperation with the Geological Survey, is continuing and increasing its investigations of water power in southeastern Alaska, which was begun in June, 1916. Fifteen Stevens automatic gauges are now making continuous records of the flow of the same number of streams. In establishing these gauges they were distributed throughout southeastern Alaska, so as to reach all the principal mining districts and regions containing large quantities

of timber suitable for the manufacture of pulp and paper. They are visited monthly by the Forest Service boats, for the purpose of winding the gauges and taking the record and making meter readings.

The national forests are not "Reserves," as every natural resource within their boundaries is available for use now.

While I am not in full accord with the principles of national forests, particularly as applied to Alaska, still under present regulations development is possible within their confines. For the existence of the Chugach Forest I can see little reason, but should it, in the interest of conservation, be considered wise to continue the control of the forest as at present, there should be further elimination of non-forested areas.

#### PROGRESS ON GOVERNMENT RAILROAD.

During the fiscal year ended June 30, 1918, good progress has been made on the Government railroad. On the main line toward Fairbanks the track has been extended to Montana Creek at mile 210.6 from Seward. Grading has been completed to mile 232 and partially completed to mile 248. Work has been let to mile 265.

On the branch line leading from Matanuska Junction to the coal fields the track has been extended 37.7 miles to Chickaloon in the heart of the coal fields. This point is 74 miles from Anchorage and 188.4 miles from Seward.

From Anchorage south toward the end of the Alaska Northern Railroad at Kern Creek the grading is nearly completed, and there remain but 15 miles of track to be laid. Track laying is now in progress and the gap between Seward and Anchorage will be closed during September.

On the Fairbanks division much grading has been done south of Nenana (mile 418), and this summer should see the grading completed to the Nenana coal field, mile 363. The past winter was an unusually severe one, the snow fall being very heavy and the periods of low temperature being unprecedentedly long. As a consequence the damage in the low country south of Nenana at the time of the spring breakup with its accompanying high water was considerable. The Nenana River, leaving the channel which it had followed for many years, broke over into Lost Slough and damaged long stretches of railroad grade. It has been necessary to change a number of miles of the railroad in this vicinity. This change is being rapidly completed.

Between Nenana and Fairbanks, in the vicinity of Happy station, about 6 miles of roadbed have been graded and a narrow-gauge track laid thereon connecting with the Tanana Valley Railroad. This allows the people of Fairbanks and vicinity to obtain a much needed supply of wood for fuel. Considerably more work in this vicinity is contemplated this season.

Much work has been done toward the rehabilitation of the Alaska Northern Railroad, and more is being accomplished. At Seward a new engine house and repair shops have been erected; also a very attractive passenger and freight station and large warehouse.

At Anchorage work is progressing satisfactorily on the installation of a wharf and approaches, and the necessary dredging is being

done to enable ocean-going vessels to land their cargoes without lightering.

During the past year considerable development work has been done in the Matanuska coal fields. At Eska Creek the engineering commission is operating a mine which is now producing about 175 tons of coal per day, and in addition extensive prospecting work is being done to ascertain the extent of the deposits. At Chickaloon, where the best naval and coking coal is to be found, the commission has done a large amount of prospecting work. Private parties, working under a Government lease, are also doing development work in this vicinity. The commission has been able to produce sufficient coal to supply its own needs and the needs of the Cook Inlet country and to accumulate a large amount available for export whenever ocean tonnage is provided. In addition, lignite coal of good quality is being mined contiguous to the railroad at a point near the Little Susitna River. In the Nenana coal fields some prospecting work has been going on, and several very promising veins are being developed, some in the immediate vicinity of the railroad.

Agricultural development is progressing favorably in the Matanuska Valley and at other points along the railroad line. The farmers have been hampered by lack of a market for their products. It is hoped that this will be gradually remedied by the future development of the mining districts.

Very good reports come from the Willow Creek and other mining districts contiguous to the railroad. It is believed that when conditions become normal again, large development will take place in both agricultural and mining industries.

The railroad, like many other enterprises, is suffering from the unusual conditions prevailing because of the great war. Many of our young men have entered the military service, and many more will undoubtedly follow. Others, tempted by the somewhat extravagant stories of high wages being paid in the States, have left the country. The forces working on the railroad have been reduced over 50 per cent. Despite these drawbacks, good progress is being made, and it is believed that the present year will see extensive additions to the operated line.

The loyalty of the commission employees has been conspicuously shown by their very liberal contributions to the Red Cross, and large subscriptions to the Liberty loan and purchase of War Savings Stamps.

#### OTHER RAILROADS.

Besides the Government railroad being constructed and operated by the Alaskan Engineering Commission, the only other operating railroads are the Copper River & Northwestern Railway, from Cordova to Kennecott, and the Pacific & Arctic Railway & Navigation Co., a part of the White Pass and Yukon Route, from Skagway to White Pass, and the Yakutat & Southern Railroad, from Yakutat to the Seetuck River.

In his report for the last fiscal year, my predecessor in office drew attention to the fact that the Yakutat & Southern Railroad, while probably performing the duties of a common carrier, had escaped

the payment of all taxes on the claim of being a private railroad. This matter is now under investigation.

On the Seward Peninsula none of the railroads are publicly operated. The Council City & Solomon River Railway has been torn up and the salvage is awaiting shipment. The Seward Peninsula Railway, from Nome to Shelton may have the same fate meted out to it. It still serves a most useful purpose as freight is transported over it on light cars hauled by dog teams, but the road bed is rapidly disintegrating.

#### THE ALASKA FUND.

The revenues derived by the Federal Government from business and trade licenses outside of incorporated towns and which are passed to the credit of the Treasurer of the United States and by him credited to the Alaska fund under the act of Congress approved January 27, 1905, amounted to \$298,161.65 for the fiscal year 1918, as against \$259,370.24 for the fiscal year 1917, an increase for the year of \$10,829.41. The sums collected during the fiscal year 1918 in each of the four judicial divisions were as follows: First division, \$127,905.11 for 1918, as compared with \$88,852.11 for 1917; second division, \$8,597.68 for 1918, as compared with \$13,892.96 for 1917; third division, \$137,047.40 for 1918, as compared with \$116,185.88 for 1917; fourth division, \$19,611.46 for 1918, as compared with \$40,439.29 for 1917.

The increase in revenues for the fund is found in the first and third divisions and is due to the increased fisheries output. The net amount of cash received from the first judicial division, however, was only \$118,418.31; the difference, amounting to \$9,486.80, represents canceled fish hatchery certificates, rebates credited to certain salmon canneries for the release of salmon fry, in lieu of cash payments of taxes on their output. The net amount of cash from the third judicial division was only \$114,085.40; the difference, \$22,962, represents hatchery rebates as above.

The total revenues received for taxes levied by the Federal Government within incorporated towns, from business and trade licenses, which were paid by the clerks of the district courts directly to the treasurers of the various towns, were: First division, \$59,538.45 for 1918, as compared with \$91,122.86 for 1917; second division, \$8,356.12 for 1918, as compared with \$11,756.15 for 1917; third division, \$11,017.86 for 1918, as compared with \$35,981.44 for 1917; fourth division, \$4,271.76 for 1918, as compared with \$34,126.37 for 1917; a total of \$83,184.19 for 1918, as compared with \$172,986.82 for 1917, a decrease of \$89,802.63, due principally to the loss of saloon-license revenues when the prohibition law became effective.

Besides the revenues derived by the Federal Government from business and trade licenses of all kinds in incorporated towns and outside of incorporated towns, taxes are levied on fisheries products as follows: Canned salmon, 4 cents per case; pickled salmon, 10 cents per barrel; salt salmon, in bulk, 5 cents per hundred pounds; fish oil, 10 cents per barrel, and fertilizer, 20 cents per ton. Section 260, Compiled Laws of Alaska, 1918, provides that the catch and pack of salmon in Alaska by the owners of private salmon hatcheries op-

erated in Alaska shall be exempt from all license fees and taxation of every nature at the rate of 10 cases of salmon to every thousand red or king salmon fry liberated; that is, a rebate of 40 cents is allowed on every 1,000 red or king salmon fry released.

Sixty-five per cent of the money paid into the Alaska fund is appropriated for the construction and repair of roads and trails outside of incorporated towns and to be expended under the direction of the board of Alaska road commissioners, 25 per cent for the maintenance of schools outside of incorporated towns, and 10 per cent for the relief of indigents, under the act of Congress approved March 3, 1913.

#### TERRITORIAL FINANCES.

The Territory has its own fiscal system, controlled by laws enacted by the Territorial legislature, which is entirely separate and apart from the revenues derived by the Federal Government from business and trade licenses and which are covered into and disbursed from the Alaska fund in the Federal Treasury. The Territorial revenue act, passed by the Alaska Legislature, session of 1917, imposes the following license taxes: Attorneys at law, doctors, and dentists, \$10 per annum; automobiles operating for hire, \$5 per annum; bakeries doing a business in excess of \$500 per annum, \$15 per annum; electric light and power plants, one-half of 1 per cent of the gross receipts in excess of \$2,500, and one-half of 1 per cent of the net profits from supplies sold; employment agencies operating for hire, \$500 per annum; salmon canneries, 4½ cents per case on kings, reds, or sockeyes, 2½ cents per case on medium reds, 2 cents per case on all others; salteries, 2½ cents per 100 pounds on all fish salted or mild cured, except herring; fish traps, fixed or floating, \$100 per annum, so-called dummy traps included; cold-storage plants, a graded tax from \$10 to \$500 per annum, according to amount of annual business done; fish-oil works, using herring in whole or in part in the manufacture of fish oil, \$2 per barrel; fertilizer and fish-meal plants, using herring in whole or in part, \$2 per ton; laundries, a graded tax, from \$25 to \$75 per annum, according to amount of business done; meat markets, a graded tax, from \$25 to \$500 per annum, according to amount of business done; mining, 1 per cent of the net income in excess of \$5,000; ships and shipping, vessels registered in Alaska not paying a tax or license elsewhere, doing business for hire or engaged in the freight and transportation business, \$1 per ton on net tonnage, customhouse measurements; telephone companies, one-half of 1 per cent of gross receipts in excess of \$1,500; waterworks, one-half of 1 per cent of gross receipts in excess of \$2,500; public messengers, \$25 per annum. The taxes collected under this act, also other taxes and revenues accruing to the Territory, are covered into and disbursed from the Territorial treasury. The fiscal year of the Territory corresponds to the calendar year. The condition of the Territorial treasury for the fiscal year ended December 31, 1917, is as follows: Total receipts from all sources, \$1,056,447.06; total disbursements under the various appropriations made by the Territorial legislature, \$373,953.95; balance of cash on hand December 31, 1917, \$682,493.11.

## ALASKA INSANE.

Under contract with the Secretary of the Interior the legally adjudged insane of Alaska are cared for at the Morningside Hospital, near Portland, Oreg., the contractor for the last 14½ years being the Sanitarium Co. In all, 743 persons have been admitted to the hospital. On June 30 there were 211 patients in the establishment, an increase of 2 over the fiscal year 1917. The distribution was as follows: Males, 186; females, 25. There were 55 receptions during the year, 37 discharges, and 16 deaths. There are three doctors in attendance for 225 patients, as compared with one doctor for about 300 patients in the average State asylum. Commencing from July 1, 1917, the rate paid per patient was \$35 per month. This rate, however, was based upon conditions as of that date and is not an adequate compensation on which to furnish the best of care and subsistence and to defray the heavy overhead expenses. Relief should be afforded The Sanitarium Co. at the earliest possible moment. At my request an unannounced inspection of the sanitarium was made by a resident of Alaska in whom I have confidence, who reports to me that all patients are as well cared for as circumstances will permit. He conversed with several of the inmates with whom he was acquainted and found little complaint. A suggestion made concerning more room for the recreation of the patients is being complied with, as well as several minor suggestions. Patients are afforded every opportunity for outdoor exercise and for work on the sanitarium farm if they so desire. The sanitarium was also visited by the Assistant to the Secretary of the Interior.

## DETENTION HOSPITALS.

Reference was made in report of the governor for 1917 of lack of funds for the proper maintenance of the detention hospitals for the insane located at Fairbanks and Nome. The hospitals were constructed in 1913. At Fairbanks partial use has been made of the hospital, but at Nome the building has never been occupied. At Nome the large Catholic hospital has been closed and all patients are now being treated at the hospital for the natives, which is inadequate for the purpose. It seems as though an arrangement might be effected whereby the detention hospital might be utilized to care for all hospital patients, both native and white, and thus do away with the present unsatisfactory service.

## PIONEER'S HOME.

The Pioneer's Home is an institution entirely supported by the Territory. Any worthy person who has been a resident of Alaska for five years preceding and who is from any cause incapable of self-support may make application for admission to the home. The buildings at Sitka formerly used as a barracks for the United States marines are occupied by the home. The home serves a most useful purpose. Old pioneers who have spent their years on the outskirts of civilization and who, through adversity, can no longer support themselves can find in the home a haven of rest in which to spend their declining years. The buildings are still the property of the

Navy Department, but the title should be vested in the Territory of Alaska, so that needed improvements and additions may be safely made. On June 30, 1918, there were 64 inmates, as compared with 70 the preceding year; there were 22 admissions; 7 were discharged; 1 committed to the asylum at Morningside; and 18 deaths. Of those discharged, 3 were pensioned by the Territory.

#### COAST AND GEODETIC SURVEY.

The Coast and Geodetic Survey in the continuance of the hydrographic surveys of Alaskan waters operated two vessels during parts of the year. The purpose in view was a closer survey of the approach to Cross Sound, the principal entrance from western to southeastern Alaska. As a result of the labor shortage caused by the war, the Coast and Geodetic Survey had difficulty in maintaining the necessary complements of men on its vessels in Alaskan waters, and this became more and more acute until one of the vessels had to be withdrawn from the surveys before the close of the season and was unable to proceed to the field in the spring of 1918.

During the course of the year two wire-drag parties were put into Alaskan waters by the Coast and Geodetic Survey, and they covered portions of the inside passages of Frederick Sound and Lynn Canal. Many unknown dangers to shipping were found by these wire-drag parties and now appear on the charts issued by the Federal Government, so that shipping can proceed with an assurance of safety in the waters that have been covered by surveys of this kind.

For the purpose of obtaining data for the prediction of tides and supplying magnetic tables, a permanent tidal station, where continuous records of the height and time of tides were obtained, was maintained at Craig throughout the year; and a magnetic observatory, where magnetic and seismological records were obtained throughout the year, was maintained at Sitka.

Agencies in Alaska for the sale to the public of the charts, tide tables, coast pilots, etc., issued by the Coast and Geodetic Survey, were as follows:

Cordova: Northern Drug Co.  
Haines: N. G. Hanson.  
Juneau: The old post-office store.  
Ketchikan: Ryus Drug Co.  
Kodiak: W. J. Erskine Co.

Petersburg: Petersburg Packing Co.  
Seward: The Seward News Co.  
Sitka: Charles M. McGrath.  
Valdez: Owl Drug Co.  
Wrangell: F. Matheson.

During the summer of 1917 two primary triangulation parties operated in southeast Alaska. The object of this work is to furnish the control for the charts and maps, and in cooperation with the geodetic survey of Canada to place the charts and maps of all Alaskan territory on the final geographic datum, called the North American Datum. When this has been accomplished contiguous charts and maps will not have gaps, overlaps, and offsets, which when present are sources of great trouble to the map makers and user. Congress has authorized geodetic surveys in the interior of Alaska, and these will be begun as soon as engineers and funds are available. This work consists of determinations of latitudes, longitudes, bearings, distances, and elevations, without which detailed mapping operations can not be carried on in a satisfactory manner.

That Alaska is greatly benefiting by these Federal surveys is not to be denied, and it is the hope that eventually facilities will be provided so that such surveys can be executed with the promptness that the needs of commerce demand. That the officials of the Federal Government are awake to this need is shown by the issuance during the year by the superintendent of the Coast and Geodetic Survey of a document under the title of "Safeguard the Gateways of Alaska: Her Waterways." Therein the situation is admirably stated and cogent reasons are given why means should be more abundantly provided for the prosecution of this work that is so much needed for the promotion of commerce and the safeguarding of life and property.

It is hoped that when war conditions have ceased to exist that Congress will make ample provisions for surveys and suitable ships, so that there may be continued progress along our coast. The loss in ships due to uncharted coasts has been enormous, and this loss, to a certain extent, is reflected in the high freight rates prevalent. Over 100 vessels, valued at over \$8,000,000, have been wrecked in Alaskan waters, the loss of many of which is directly traceable to lack of surveys. Included in this number is the revenue cutter *Tahoma*, wrecked in 1914 on an uncharted rock. The value of the *Tahoma* was estimated at \$300,000. There is record also of over 300 smaller vessels, valued at over \$5,500,000.

#### AIDS TO NAVIGATION.

Eleven new lights were established in Alaska by the Bureau of Lighthouses since June 30, 1917. Three lights were changed from fixed to flashing, and 1 gas buoy, 12 buoys of other types, and 5 beacons were established.

Before the present season is over 16 more new lights will be established, as well as two new gas and bell buoys and an unlighted day mark. A considerable number of new aids to navigation will be installed before the close of the present fiscal year, which ends June 30, 1919, and working scow and other equipment will be purchased during the year.

The Bureau of Lighthouses will also recommend to the Department of Commerce that appropriations be asked of Congress as follows: Seventh-five thousand dollars to continue the work of installing new aids to navigation in Alaska; \$125,000 for a light and fog signal at Cape Spencer, Cross Sound, to replace an automatic acetylene light now established at that place; and \$70,000 for improvements at existing stations for which funds are not now available.

The total number of aids to navigation in Alaska, including lights, gas buoys, fog signals, buoys, and day marks, in commission at the close of the fiscal year ended June 30, 1918, was 437, including 160 lights and 7 gas buoys, representing an increase of 130 lighted aids since June 30, 1910, or 351 per cent.

#### FEDERAL ROADS IN ALASKA.

The Alaska Road Commission, constituted by act of Congress approved January 27, 1905, is composed of three officers of the Army, who report to the War Department through the office of the Chief of Engineers.



The commission was organized "for the maintenance and construction of roads, bridges, and trails," and for the "construction and maintenance of military and post roads, bridges, and trails, Alaska." The total expended for all construction and maintenance to June 30, 1918, is \$4,788,576.93. Of this amount \$2,820,000, or 59 per cent, was appropriated at different times by Congress and \$1,968,576.93, or 41 per cent, from the Alaska fund. One thousand and six miles of wagon road, 673 miles of sled road, 2,346 miles of trail have been constructed and maintained since 1905. Approximately 300 miles of wagon road has a light gravel surface.

A total of \$597,020.18 was expended during the fiscal year ended June 30, 1918. Of this amount \$274,428.45 was for maintenance of existing roads, bridges, and trails and \$322,591.73 was charged to construction, most of the expense of construction being for extensive improvement of present roads and trails. During the year the mileage was increased as follows: Twenty-six miles of wagon road, 50 miles of winter sled road, and 55 miles of trail. In addition to this new work, several new bridges were constructed.

While the funds at the disposal of the commission do not permit the construction of so-called "automobile roads," a fairly accurate census of automobiles and trucks in the Territory show 386 machines are being operated.

The congressional appropriations have always been included in the annual appropriations for the support of the Army. The board is required by law to expend the funds received from Congress on projects which are strictly considered as military and post roads, bridges, and trails. The main project coming under this head is the Valdez-Chitina-Fairbanks wagon road and all the various connecting roads and trails. This comprises a system of roads and trails approximately 3,750 miles in length and reaching practically every town of importance west of the one hundred and forty-first meridian with the exception of towns along the Copper River Railroad and a few places along the coast. Mail is carried overland from Chitina to Arctic City and to Caro, above the Arctic Circle; to Eagle on the Upper Yukon near the Canadian boundary; to Fairbanks, Fort Gibbon, and lower Yukon points; to St. Michael, Kotlik, Nome, and the surrounding country, terminating at Candle, on Kotzebue Sound. Seward is the southern terminus of branching roads and trails, which join the main system at various points on the Yukon River. By this route Anchorage, Knik, Cache Creek, Ophir, Iditarod, Lewis, Kaltag, and many other districts are reached.

In the matter of expenditure of the Alaska fund, the commission is given more latitude and allotments are permitted for projects which are not considered as military or post roads. Funds have never been abundant and the commission has not been in a position on this account to undertake a great many projects of merit. The commission is required to maintain present roads, improve these roads as much as traffic conditions and available funds will warrant and to undertake the construction of new work after the former requirements have been fulfilled.

Prices of labor, supplies, and material are high, and until conditions return to normal the commission will be greatly restricted in extending its present system.

There were formerly four different organizations having charge of road work in Alaska. In addition to the Alaska Road Commission, the United States Forest Service, the United States Office of Public Roads, and the Territorial road commission were engaged in road work. All of the Federal work is now combined and the president of the Alaska Road Commission, in addition to his duties as such, is in local charge of all work under the jurisdiction of the Federal bureaus. This makes a very effective working arrangement, reduces expenses, and insures the maximum benefits from cooperation. The Secretary of Agriculture is not releasing funds for the work of the Office of Public Roads and Forestry Bureau in Alaska during the present emergency. The funds stand to the credit of the Territory and will increase at the rate of approximately \$46,000 per year up to and including the fiscal year ending July 30, 1926. July 1, 1918, the fund amounted to \$139,084. The act appropriating this fund requires that it be expended in cooperation with local road organizations (in the case of Alaska, with the Territorial road commission). To secure the benefits of this fund it is necessary for the local authorities to enter into a formal contract, termed a cooperative agreement.

Approximately \$325,000 is available for road work during the present fiscal year (1919). The crying need of the Territory is for roads. Alaska will never reach a high state of development until a system of good roads covers the entire country. Almost all routes of travel cross long stretches of boggy country over which it is impossible to drag a wagon. In consequence development is along primitive lines when once the established routes of transportation are abandoned. The scope of work of the board of Alaska Road Commissioners could well be doubled or trebled without increasing their overhead expense. Appropriations of \$750,000 or \$1,000,000 per annum would only be a fair amount with which to continue their excellent and constructive work.

#### TERRITORIAL ROADS.

In addition to roads constructed and maintained by the Alaska Road Commission, the Territory has appropriated \$200,000 yearly for roads not otherwise provided for; this amount is equally divided among the four judicial divisions to be expended under the direction of a road commission elected in each division and an advisory body of two assistant road commissioners appointed by the governor.

In the first division a portion of the funds are being utilized to dredge a waterway for small craft from Gastineau Channel to Fritz Cove on Stephens Passage, thus allowing fishing boats coming from the north to proceed directly to Juneau instead of making the long detour of Douglas Island. Approximately 200 miles of wagon road are constructed and maintained and 52 miles of winter sled roads; 234 miles of winter road in the second division are staked annually. Relief cabins are erected at many places where winter travel is dangerous.

#### AGRICULTURAL EXPERIMENT STATIONS.

The summer of 1917 was very unfavorable to agricultural operations, except for one redeeming feature, and that is that killing frosts

were from two to three weeks later than normal. This fact prolonged the growing season to such an extent that all the crops at the stations at Rampart and Fairbanks, which are chiefly devoted to grain growing, matured perfectly, so that in spite of the fact of a cold wet summer the crops matured, owing to the prolongation of mild weather.

There are now five agricultural experiment stations operated under the auspices of the States Relations Service. Each station has been assigned its own specific task, and a clearer conception of the work as a whole can best be had by taking up the work of each station in succession.

#### SITKA STATION.

The Sitka station is devoted entirely to horticulture, for the reason that the heavy rainfall in the coast region prevents the growing of grain except during abnormally favorable seasons. At Sitka they experiment with orchard fruits, berries, vegetables, and ornamentals. In the test orchard there are a few trees each of some 15 or 16 different varieties of apples. Only two or three of these have borne fruit to maturity, and they are Yellow Transparent, Lowland Raspberry, and Keswick Codlin. The cloudy and cool summer of 1917 was so unfavorable that not a single apple matured. Several varieties of cherries were a failure for the same reason.

Of the small fruits, gooseberries, currants, and raspberries were a success. These bush fruits can be grown throughout the coast region of Alaska every year almost without failure.

Experiments are made somewhat extensively with strawberries and they have produced hundreds of varieties of hybrid strawberries, the result of the crossing of cultivated berries with the wild berries of the Territory. About 10 per cent of the varieties produced prove to be of sufficient value to warrant further trials. These hybrid strawberries are all hardy in the coast regions and many are hardy in the interior, where they will stand temperatures of 60° below zero without other protection than that afforded by the snow. Many of these new creations have been tried at the experiment stations at Rampart and Fairbanks for several years past and found to bear fruit abundantly. It is permissible to point out that the production of these berries will be of inestimable value to the Territory for all time to come. Heretofore strawberries could not be grown in the interior because the plants invariably died during the winter.

The characteristics of these hybrids are: First, that the plants are much more vigorous and grow to larger size than either of their parents; second, that many of the berries are of very large size and of delicious flavor that partakes of the flavor of the native wild berry. But they are also soft and can not bear shipment to distant points. They are especially adapted to home consumption and to local market.

At Sitka station they also experiment with the production of new varieties of potatoes, and at this writing have upward of 300 varieties growing which have been raised from seed balls at the station. It is not expected that many of them will be of much value, but even if only a few varieties can be produced here in Alaska which shall be adapted to our peculiar climate the labor will be well spent.

The ordinary hardy vegetables, cabbage, cauliflower, peas, and root crops of all kinds, were a success.

A number of hardy shrubs and perennial flowering plants are under test at the station and many of them can be grown successfully throughout the coast region.

It is at this station that they also propagate a long line of the aforementioned fruits and small fruits with a view to having them tested by settlers in other sections of the Territory, and for this purpose the plants are distributed free of charge. The chief value of this distribution is that the Territory gradually becomes stocked with useful plants and some valuable information is also obtained from their behavior in the various districts.

#### RAMPART STATION.

The northernmost station is located at Rampart in latitude 65° 31'. This station is chiefly devoted to the breeding of grains and leguminous plants. Upward of 100 varieties of grains of all kinds have been tested there and many new varieties have been created at that station. This is done by cross-pollinating existing varieties with each other; for instance, certain varieties of barley mature early, but in other respects are inferior. Other varieties are of superior quality, but they mature too late for that latitude; that is to say, they are usually caught by early frosts before they ripen. By crossing some of these latter with an early variety some of the offspring will be vigorous growers and heavy producers, and at the same time they have acquired the earliness of the early parent. There have been produced at this station several varieties of barley which are early enough to mature even in unfavorable seasons and at the same time are superior to either parent in productiveness. The same class of work is being done with spring wheat and oats. It is found that grains that are born and bred, so to speak, in the Alaska climate are better adapted to Alaska than varieties introduced from the outside. It is slow work, but the success has been such that in the course of a few years more it may be reasonably expected to have established varieties of wheat, barley, and oats that can be counted on to mature in interior Alaska.

Alfalfa is one of the forage plants that have been under experiment at that station for a number of years. Seed of a hardy species of alfalfa was obtained from Siberia through the Department of Agriculture some nine years ago. This species which has yellow flowers is found to be entirely hardy in interior Alaska, and energies have been directed toward the selection of desirable types of this species and the propagation of these types. There are now about ten acres of this alfalfa at Rampart station, all of which is devoted to seed growing in the hope that eventually enough seed may be raised so that the whole of interior Alaska can be stocked with this valuable plant. The experimental station is doing a valuable work for the Territory in the breeding of grains, alfalfa, and other plants.

#### FAIRBANKS STATION.

The Fairbanks experiment station is located in a fine agricultural region which is being well settled with farmers. The station is there-

fore operated chiefly as a model farm so as to afford an object lesson to those who visit it, but it is also used for the growing and increase of seed from new varieties produced at Rampart, or introduced from other sections, and the grain produced is either sold for seed at a nominal price or it is distributed free of charge among the farmers for the purpose of introducing among them those varieties of grain which have been found to successfully grow in the interior. Upwards of 1,200 bushels of grain were thrashed out from the 1917 crops.

A certain variety of turnip which was introduced from Finland by the Department of Agriculture has been found to be well adapted to the Alaska climate and in some respects it is the best turnip that has been tried at the stations. Upwards of 3,000 pounds of seed from this turnip have been produced at the Fairbanks station during the last few years. This seed is distributed free of charge to settlers all over the Territory.

The experimental station has also undertaken certain lines of co-operative work with the farmers of the interior. The superintendent of the Fairbanks station has the immediate charge of these co-operative experiments. Certain amounts of seed grain produced at the Fairbanks station are furnished to those farmers who desire to co-operate. These grains are then seeded under the instructions of the superintendent of the co-operative work, who also gives advice and suggestions on the problems that confront the farmer. The climatic conditions at Fairbanks are somewhat more favorable than they are at Rampart. The rainfall is slightly greater and the season between frosts a little longer. In 1917 there were 123 days from the last frost in the spring until the first frost in the fall, which is about three weeks longer than normal.

#### KODIAK STATION.

The Kodiak station is devoted entirely to the breeding of live stock. It is stocked with a herd of Galloway cattle which are well adapted to the country. They do well on the native pastures. Some two years ago a small herd of pure-bred Holstein-Friesian cattle was introduced. The object of the introduction is twofold—first, to ascertain how that breed will prosper under the climatic conditions of the western coast region and, secondly and chiefly, for the purpose of cross-breeding them with the Galloways in an effort to establish a hardy breed indigenous to Alaska which shall partake of the hardy quality of the Galloways and, in some degree, of the milking qualities of the Holstein. This experiment has not proceeded far enough to make any report on the results.

Another line of experiment is under way at this station. It was found that some of the Galloway cattle had become infected with tuberculosis. These affected animals were segregated from the sound part of the herd, and they are now bred by themselves. Their calves are fed on sterilized milk, the object being to ascertain if healthy calves can be reared from parents affected with tuberculosis.

#### THE MATANUSKA STATION.

A station was established in the Matanuska Valley April 1, 1917. Nothing but pioneer work could be done during the first year, but

some buildings have been erected and about 12 acres of land cleared which will be cropped the current year. The clearing will be extended as fast as money is available to pay for the labor. It is believed that the Matanuska Valley is well adapted to nearly all phases of farming, and the station will be charged chiefly with the work of assisting the farmers with the problems that confront them in all lines of their work. It is believed that live-stock breeding, and particularly dairying, will be important features of farming in that region. The station will do its best to cooperate with the Alaskan Engineering Commission in the development of territory along the line of the railway.

The railway will do more to develop interior Alaska than all other agencies put together. Adequate transportation facilities and a very large reduction in freight rates are the two essential features in the work of development. It is devoutly to be hoped that for the good of Alaska railroad construction under the direct supervision of the Government may become a fixed policy for this Territory, and that the work may be prosecuted with vigor until the several projected lines are completed.

Referring now to the work of the experiment stations under way for the current season, it may be stated that the experiments outlined above are continued at the several stations. Cold weather continued until late in the spring, and seeding was not completed until the beginning of June, which is some two weeks later than normal. However, June and July have been favorable from the standpoint of climate, and if good weather continues it is certain that Alaska farmers will have a prosperous season. There are many millions of acres in interior Alaska which can be converted into productive farms as fast as transportation facilities are provided and fares and freight rates are reduced so that settlers can afford to come in and open up the country as markets are provided.

#### COAL.

The coal-using districts of Alaska have suffered greatly through the increased cost of coal and through the inferior quality of Washington and British Columbia coal now being shipped.

The two most prominent fields of Alaska, the Matanuska and Bering River fields, are as yet not developed on a large production basis, and so are not commercially important factors; but there is no reason why all Alaskan demands should not be immediately satisfied with Alaska coal, providing transportation from the coal fields can be procured. It is evident, to my mind, that no permanent relief can be found with the existing steamship lines, as their southbound space is not only crowded with ore or canned fish, but their rates on southbound coal will not allow of competition with coal from British Columbia. If the Government is to furnish commercial coal from its operating mines at Chickaloon, steps should be taken to acquire a steam barge or barges on which to make distribution.

In the interior of Alaska coal is being mined in the Nenana coal fields, but so far is only being used to a limited extent by the Alaskan Engineering Commission at Nenana.

In the Matanuska field the first mine operated was the Doherty coal mine, about three-fourths of a mile from the railroad right of

way on Moose Creek. Following this the Eska Creek Coal Co. opened a property  $2\frac{1}{2}$  miles from the right of way on Eska Creek. Later this property was taken over by the Alaskan Engineering Commission.

Coal leases Nos. 2 and 3 on Moose Creek have been let to Mr. Henry Baxter of Anchorage, who at the present time is prospecting the property. During the past season while the roads were in good condition for sledding, Mr. Baxter shipped about 5,000 tons from this property.

Leasing units Nos. 10 and 11 are controlled by the Chickaloon Coal Co., which is prospecting the same by two cross-cut tunnels and is preparing to install a diamond drill.

Leasing unit No. 12 was set aside June 18, 1917, by an executive order of the President for the use of the Alaskan Engineering Commission, which is at the present time prospecting the property.

In June of 1917 the Eska Creek Coal Co., not having sufficient finances to open their property on a comparatively large scale, sold the improvements on the lease to the Alaskan Engineering Commission, since which time the commission has mined its own supply of fuel. The output at present from this property approximates 5,000 tons per month. The commission employed approximately 160 men at its two mines, while the other lessees probably employ between 40 and 50.

In the Bering River field one unit is under lease and is being extensively prospected.

#### PETROLEUM.

Petroleum is now being produced in paying quantities from a few shallow wells near Katalla, with further drilling in progress. There are seepages and other oil indications on the Kenai Peninsula, the Seward Peninsula, the Alaska Peninsula, Cook Inlet, at Yakataga, and persistent rumors of oil pools found near the line of the Government railroad north of the Alaska Range. The finding of oil in quantity in any one of these localities would be a wonderful boon to the country, which is going on an oil-burning basis as rapidly as price and supply will permit. Petroleum found is a very high grade oil with a paraffin base. The small plant at Katalla produces gasoline and distillate, the residue being sold for fuel oil. As matters now stand, with the exception of a few patents, the oil lands of Alaska are entirely tied up in Government withdrawal. When legislation now before Congress has been enacted, an attractive field will be opened up to the prospector financially able to bear the expense incident to oil exploration.

#### WATER-POWER INVESTIGATIONS IN SOUTHEASTERN ALASKA.

The streams of Alaska have been important factors in its industrial growth. The success of placer mining in northern and central Alaska has depended primarily on the water available for hydraulicking and dredging, and in southeastern Alaska water power has long been used by mines, canneries, sawmills, and other industries, although until recently most of the plants have been small.

Since 1906 the United States Geological Survey has made systematic studies of the water resources of Alaska. Investigations with special reference to placer mining have been made in Seward Peninsula and the Yukon-Tanana region, and reconnaissance surveys for water power have been made about Prince William Sound, Copper River, Kenai Peninsula, and in other parts of southern Alaska.

During the last few years some large water-power plants have been installed near Juneau to supply power for mining, and attention has been called to the feasibility of improving other power sites in that region and elsewhere in southeastern Alaska to meet the increasing demand for power to be used in mining, lumbering, and fisheries and the possible future demand for its use in the manufacture of wood pulp and electrochemical products. Lack of definite information in regard to the quantity of water available and other physical factors that determine the feasibility of a power site has been one of the principal impediments to development. For this reason a systematic investigation designed to determine the location and the feasibility of water-power sites in southeastern Alaska was begun by the Geological Survey, in cooperation with the Forest Service, in the spring of 1915.

The practicability of a water-power site depends on the quantity of water available, the fall, and the possibility of storing water. Information in regard to fall and storage can be obtained by surveys at any time, but the volume and distribution of flow can be determined only by observations extending over a period of several years, as future flow must be predicted from that of the past. In beginning the investigations, therefore, the collection of stream-flow data was given precedence, and constituted the principal work. Some approximate information, however, has been obtained in regard to the elevation above sea level of the stream bed at possible dam sites and area of lakes available for storage reservoirs.

The available power sites in each area were carefully considered, and gauging stations established by the Geological Survey, in cooperation with the Forest Service, at those sites which apparently afforded the greatest opportunities of development. In addition the Geological Survey and the Forest Service have cooperated with private individuals and corporations in the installation and maintenance of gauging stations.

Records have been collected in accordance with the standard methods used elsewhere in the United States by the Geological Survey. Owing to the inaccessibility of the stations, water-stage recorders were used at all the stations except that on Ketchikan Creek, and cables have been installed from which discharge measurements are made.

Records of flow are now being obtained at 23 gauging stations.

The data collected at the gauging stations, which include a general description of each station and tables showing the results of discharge measurements and computed daily discharge from date of establishment of station to December 31, 1916, are published in United States Geological Survey Bulletin 662-B. The data for 1917 have been computed and will be published in a subsequent bulletin.

Copies of computed records not yet published and preliminary estimates of flow for any station can be obtained by application



to the Director of the United States Geological Survey, Washington, D. C., or to G. H. Canfield, engineer of the Geological Survey, at Juneau, Alaska.

#### TOURIST TRAVEL.

Reports from the various transportation companies operating to and in Alaska show that the tourist travel during the present year was but little more than half that of last year, which in turn was much less than that of preceding years and before America entered the war. Also, it was noticed this year that tourists visiting this Territory were mostly women and olderly men, the bone and sinew of the Nation being conspicuous by its absence, that element being engaged in something more profitable than pleasure junketing.

#### HOME GUARD.

It has been impossible to organize a National Guard in Alaska, owing to the decrease in population, and to the fact that a very large per cent of the able-bodied men have entered the country's service. However, the men remaining in the Territory, those of deferred classification, rejected on account of some slight physical defect, and those over age for the draft, have formed home-guard organizations and have been given such support by the governor as is possible. Rifles have been procured from the War Department, and drilling has been earnestly kept up. There are now 8 home-guard organizations in Alaska, distributed as follows: Juneau, 100; Ketchikan, 53; Seward, 30; Sitka, 50; Cordova, 150; Anchorage, 70; Fairbanks, 112; Eagle, 16; a total of 581.

Instructions in the manual of arms and in squad and company formation are held in rented armories twice a week.

While the guards as yet can only be used in an emergency, after being deputized by the United States marshal, still the moral effect on the men and on the community is most noticeable. The younger members who have been called to the colors are much more quickly fitted for military life, as is shown by the large number of enlisted or inducted members who have almost immediately been raised to non-commissioned rank. It is hoped that the coming Congress will give them the standing of constabulary, and that the territorial legislature will appropriate sufficient funds to make them a uniformed body and to provide for more extensive instruction. I believe it the duty of every able-bodied man to provide himself with a certain amount of military training and to be ready to answer any call at a moment's notice.

#### SELECTIVE SERVICE.

At the time of forwarding the annual report, information on the operations of the selective-service law had been compiled to September 30 and is therefore submitted:

By proclamation dated June 30, 1917, the President set the period between July 2 and September 2, 1917, inclusive, as the time for registration in the Territory, under the act of May 18, 1917.

To accomplish the purpose of the act, 21 local and 4 district boards (one in each judicial division of the Territory) were created. Local

board No. 15, at Chena, was abolished in 1917. Local board No. 22, at St. Michael, was created in 1918. Their jurisdiction extended over an area which is one-fifth that of the United States proper and is handicapped with inadequate and, at times, primitive means of transportation. In the greater portion an unsatisfactory and intermittent mail service prevails. In many instances three months elapse before replies to communications are received. These conditions have forced the omission herefrom of compiled data relative to many interesting features in connection with the effect of the draft on industries, particularly those of mining and fishing.

Eleven thousand and seventy-one persons were registered, at a cost of \$380.90, or 0.032 cents per registrant, as compared with the national average of 54 cents in 1917. Thirty-eight per cent of the above were aliens, of whom approximately 1,000 were alien enemies, 326 being Germans. One hundred and eighteen were colored persons. No Indians were registered.

Under orders from the Provost Marshal General those registrants who claimed residence in other States or Territories or who gave permanent addresses therein were transferred to their respective jurisdictions. Local boards state that these transferred cases have caused nearly as much work, investigation, and trouble as those remaining. Transferred cases numbered 4,496, leaving our net registrants at 6,575. Exceedingly few cards of Alaskans who registered in the States were transmitted to the Territory, although their number was considerable.

On September 1, 1918, the report of registrants in class 1 disclosed the following:

Remaining finally classified in class 1 and examined physically and accepted for general military service.....	849
Limited military service.....	278
Remedial defective group.....	34
Emergency fleet.....	120
Delinquents.....	837
Not physically examined.....	223
Inducted and called for induction.....	295
Total.....	2,636

To this number should be added the following:

Inducted under call 193.....	696
Credits for enlistments, voluntary inductions, etc.....	164
Grand total.....	3,496

It will thus be seen that 53.2 per cent of our registrants have been classified in class 1.

The 837 delinquents and the 223 not physically examined constitute 16 per cent of the number registered. This high ratio is due primarily to the following causes, listed in the order of their importance:

(1) The high percentage of illiterate and non-English-speaking aliens in the Territory.

(2) Vast extent of the Territory. Some registrants are from 500 to 1,000 miles distant from the nearest local board.

(3) Infrequent mail service to remote points and consequent failure to receive orders within the allotted time.

(4) The absence of physicians in many localities. Many registrants are located several hundred miles from the nearest medical examiner. Many have traveled hundreds of miles at their own expense for purposes of examination and induction.

By October 1, 1918, 2,200 registrants (or 33½ per cent of the gross number) will have been inducted. In addition thereto many hundreds, impatient for action, enlisted prior to the registration period or joined the British and Canadian forces. Alaska has furnished at least 3,000 men to the colors, or approximately 12 per cent of its present total white population.

The expense of accomplishing the draft for the first 15 months will not exceed \$12,000 or \$5.45 per man inducted. The national average for 1917 was \$4.93.

Incomplete returns disclose that 118 men were physically rejected out of 1,220 examined by local boards, an average of 10 per cent, as compared to the national average of 29 per cent. Of those examined by local boards and accepted, who were again examined at mobilization camps, available data at this time disclose that 18 out of 681 were rejected by the camp surgeons, a ratio of 2.66 per cent as compared with the national ratio of 5.8 per cent. When this information is complete it will furnish a most interesting medical and sociological study.

Under the provisions of the act of May, 1918, persons who attained the age of 21 years since September 2, 1917, were registered in the period between July 2 and September 3, 1918. Returns thereof are yet incomplete. It is estimated the number will not exceed 250 including Indians.

By proclamation on September 18, 1918, the President set the period between October 15 and December 16, 1918, inclusive, as the time for registration in Alaska, under the act of August 31, 1918. Indians will be included.

To the members of the local boards too much credit can not be extended for their intelligent and loyal efforts. Their labors have been intense and, heretofore, uncompensated. The district exemption boards, medical, and legal advisory boards and their associates have performed a great work with efficiency and fidelity and deserve the gratitude of the country.

#### MAIL SERVICE.

It is to be regretted that in the interest of economy the mail service in the Territory is being constantly impaired. If the Post Office Department could be only brought to realize that on their service the growth of the country is as much dependent as on the work of the more typically constructive departments, a world of good would be accomplished. In the past mail contracts, it may be said, have been largely in the nature of a subsidy for ocean-going steamships to call at the smaller towns along the coast and in the islands, but incidental to the mail contracts the settlers in remote parts have been able at least to keep in touch and transact business with the outside world. Although writing subsequent to the fiscal year 1918, I consider the situation of sufficient gravity to make a brief mention of some of the hardships entailed under the present system. After August 1, 1918, all through mail contracts to southeastern and western Alaska

were discontinued, first-class mail being sent by express and second-class mail and parcels post by freight. Mail clerks were removed from all steamers. Contracts for delivery of mail to outlying places are given to small carriers, usually launches having little or no cargo or passenger space. Particularly during the winter months, when there is insufficient freight offering to induce steamers to make the smaller ports, is the small merchant or individual cut off from any opportunity of receiving needed supplies. Shortly after August 1 the steamer *Dora* on the Seward-to-Nushagak run discontinued service on account of loss of mail contract. To the date of October 1 there had been no communication with Bristol Bay and the Aleutian Islands. At Seward I found orders for several hundred tons of supplies, which probably can not be delivered this year, with the result that many people may be forced to make their way as best they can to a base of supplies. Such relatively important places as Skagway, Petersburg, Wrangell, Katalla, Kodiak, and Seldovia will undoubtedly suffer until spring brings a resumption of the fishing industry. The larger towns are not without their grievances also. At the best steamer schedules are very irregular. A week or 10 days may elapse between the sailings of steamers. It thus becomes imperative that a great deal of correspondence should be answered by the same steamer on which it has arrived. Under the former system mail clerks had mail sorted and classified, and postmasters were thus enabled to have mail brought immediately from the ships to the post office, where it received almost instant distribution. Under the present method there is delay in transporting the express and freight to the post office and more delay in sorting. Should a steamer be sailing late in the evening or early in the morning, letters must be in the post office by 4 p. m. the day before. Even should a steamer arrive so as to allow mail distribution on the same day, it is often necessary for the sake of making answer to illegally intrust valuable letters to an unknown passenger or face another delay until the next steamer shall arrive.

On account of the great inconvenience entailed by the present system, feeling is very bitter, particularly when it is noted in the press that various and expensive airplane services are being inaugurated in the States between points which at the worst are only a few hours apart with frequent mail trains. It is earnestly hoped that there may be relief afforded to the mail situation and that at the very least mail clerks may be replaced on the Alaska run.

#### RELIEF OF DESTITUTION.

Funds for the relief of destitution are provided both by the Federal and Territorial Governments. Ten per cent of the Alaska fund is distributed among the judges of the four judicial divisions for the relief of the needy, the expenditures for the fiscal year 1918 being \$22,228.46. Territorial relief is afforded through biennial appropriations as follows: Pioneers' Home, \$60,000; dependent children, \$15,000; relief of destitution, \$15,000; allowances for aged pioneers, \$30,000.

Many cases of destitution do not come to the notice of the various boards controlling available funds. The Alaskan is proverbially charitable and his pocketbook is always open to those in distress. The fraternal orders are generous to the extreme.

## GOVERNMENT ASSISTANCE TO MINERS.

The experiment station of the Bureau of Mines, located at Fairbanks, is in full operation, filling a long-felt want with miners and prospectors. The station is thoroughly equipped to make mill and concentrating tests and qualitative determination of minerals. Advice as to process of mineral extraction is given and already mills are being constructed along designs furnished. An engineer of the Bureau of Mines is in charge, aided by a corps of qualified assistants. The work is most useful and constructive.

At Anchorage the Geological Survey has located an office with one of its most competent geologists in charge, who cooperates fully with those interested in the mineral-production problem of the district. The establishment of such an agency is a long step forward in governmental assistance to commercial development.

## POLICE PROTECTION.

Alaska, outside of the incorporated towns, is without police protection except as afforded by the various wardens and the special employees for the suppression of the liquor traffic among the natives. The marshal's office is hemmed around with restrictions concerning expenditures for the detection of crime, which makes it almost impossible to prevent crime or to run down lawbreakers after a crime has been committed. A late ruling of the Attorney General, made at my request, allows more freedom to the marshals and district attorneys in the detection of crime, but even such allowance is not adequate. We have at present in the Territory wardens of various types, as follows:

Game wardens.....	11
Fur and fish wardens.....	12
Forest rangers.....	6
Special employees.....	4
Total.....	33

I propose that there be established a uniformed constabulary of 150 or 200 men, the officers of which shall be commissioned by the President and assigned to the entire policing of the Territory, this force to embrace all the wardens and officials enumerated above and to be charged with the enforcement of the law. A constabulary where established by the various States has proved an undoubted success. The force can also be used for relief of and search for lost persons, the enforcement of quarantines, and general patrol work. By the establishment of such a force an equal number of troops can be withdrawn from Alaska and some of the minor posts turned over to the constabulary for headquarters. The cost to the Government would be little more than for the maintenance of an equal number of troops and the results eminently more satisfactory. The Royal Northwest Mounted Police of our ally, Canada, has proved its worth time and time again, and we may well profit by the experience. The force should be absolutely removed from political influence, and both officers and men should be appointed only after a searching investigation of their moral, mental, and physical fitness.

## GAME LAWS.

It is evident to anyone familiar with Alaska that the game laws are greatly in need of revision. The general idea of those ignorant of true conditions is that the average Alaskan slaughters game from the lust of wanton slaughter; that an attempt is being made to build up a huge cold-storage industry, and such speak learnedly of the "cold-storage trust," whatever that may be. As a matter of fact, the real Alaskan is very jealous of the game of the Territory; he realizes its great need for the development of the country, and no one can bring himself into greater disrepute in a community than by the reckless killing of game.

The use of game both in the settlements and in the hills is necessary, and the prevention of the sale of game in the smaller towns and villages would result in hardship. It is not everyone who can take the time to go to the hills to kill his own meat, and yet meat is a necessary article of diet to all. There are very few big-game sportsmen in Alaska. Shooting is done not for the sake of hanging a trophy on the library wall, but for food; for food in a land where in many places the cost of beef is twice that charged in the States or is even impossible to obtain at any price. Game laws, and stringent ones, are necessary, with plenty of wardens to enforce their provisions, but the laws should be made by men familiar with Alaska. It is impossible to make one law to fit a Territory as large as Great Britain and Ireland, France, Belgium, Serbia, Montenegro, Italy, Roumania, and Portugal, combined, with Alsace and Lorraine returned to France. We should have laws for game zones with elasticity of administration. When game in one zone is endangered there, let that zone be closed to hunting until the supply is replenished. Different closed seasons should exist for different zones. It is hardly possible that the Congress of the United States can devote the time to make a proper study of the Alaskan game situation, and it should delegate the authority to make game laws to the Alaska Legislature, composed of men from every section of the Territory. Should Congress not be willing to take this step, they should at least provide for a committee to visit the game sections of Alaska and recommend laws. Such a committee should not be composed of sportsmen, but of a representative of the Department of Agriculture, a member to be appointed by the governor of Alaska or the Secretary of the Interior, and a third to be selected by the two already chosen.

The shortcomings of some of the laws are exemplified in the law for the killing of wild fowl. The open season for such birds is from September 1 to March 1. By September 15 practically all ducks and geese have left the interior waters for ice is forming on the lakes and ponds; the southward flight from the coast is well under way. The killing of wild fowl should be permitted to commence on August 15.

The existence of game is seldom endangered by its proper use, but by its abuse. Unfortunately in any country there are always individuals or associations who will break laws unless such laws are properly enforced. It is by the breaking of laws that game has been driven from certain localities in Alaska. Canneries and mining companies have fed their employees in and out of season on deer,

moose, sheep, and caribou; unscrupulous hunters have taken dogs to board during the summer months and have fed them choice pieces of meat; market hunters have killed big game and brought only the hind quarters to market. Like the laws for life and property, game laws must be enforced to be effective. To do this there must be more wardens with larger allowances for travel, but most of all we must have just laws, which the people themselves will hold in respect.

#### CONSOLIDATION OF DEPARTMENTAL AUTHORITY.

Under the caption "Red Tape in Alaska," Secretary Lane wrote a splendid expose of the interlocking of bureau authority. In a recent visit Secretary Redfield, in public speeches laughingly asked the question, "When is a brown bear a brown bear?" Some brown bear are under the jurisdiction of the Department of Agriculture, while others are in charge of the Department of Commerce. Brown bear, which belong to the black-bear family, may be killed at any time; the hide of the black parent may be exported, but the brown baby, in the eyes of the collector of customs, is a brown bear and is taboo.

Fur-bearing animals are under the jurisdiction of the Department of Commerce, while game animals are controlled by the Department of Agriculture.

Alaska birch, valuable only for firewood in Alaska, but greatly in demand in furniture factories, may be exported if grown on forest reserves but if grown on public lands must remain to rot or to be burned. Lands in forest reserves must pass through both the Forestry Service and the Land Office before a settler has any assurance of title. The time-honored game of "passing the buck" confronts the investor or settler at every turn. Many become disgusted and turn away, to Alaska's loss. Alaska has been the orphan victim of innumerable fatal fads and fancies. As fast as practicable, the control of the resources of Alaska should be vested in the Territory, but in the meanwhile in the interest of efficiency, economy, and the general welfare of the people, let us do away with divided authority. One department should control all of the land above and below the surface, one department should control all the sea and its inhabitants, and one department should control all the land animals and birds. It would be most easy to enumerate case after case of confusion resulting from mixed authority and such confusion will continue to exist until authority has been consolidated.

#### RESERVATIONS AND WITHDRAWALS.

It has been the custom of former governors to rail at the number and extent of ill-advised reservations. In this respect I am no exception. Practically all of the vast reservations have been made without proper investigation and the result has been a lasting blow to the Territory. On account of reservation without investigation many men have lost their all and have even been driven to suicide. To my mind practically all of the reservations should be eliminated and the laws of the United States made to apply. Capital is wary of investing where title is covered by regulations instead of law and the pioneer is hard to satisfy with a lease. The huge Yukon Delta

Bird Reservation is a reservation on paper only. It is inhabited chiefly by Esquimo and Aleuts who do not know the meaning of a reservation and who would suffer hardship if the law were enforced. It is safe to say that none of the white inhabitants pay any attention to restrictions of the reservation. A reservation once established is hard to have eliminated; to do so is evidently taken as a reflection on those primarily responsible for its creation. For the sake of the future of Alaska, let there at least be no more reservations without a thorough investigation on the ground by practical men and not simply on the recommendation of men whose interest in the Territory is merely academic or sentimental.

#### AIRPLANE LUMBER.

Sitka spruce has been found to possess all the requirements of airplane construction in the highest degree. It is light, strong, tough, and compact. In all, 1,231,652 board feet, valued at \$87,350 have been exported. Undoubtedly a much better showing could have been made except for the difficulty in having inspection made in Alaska and in procuring transportation. Sitka spruce, while found in scattered stands all the way from Oregon to Kodiak, is at its best in Alaska, and is practically the only wood used in the manufacture of lumber.

#### PUBLIC BUILDINGS.

The Territory is greatly in need of a public building at the capital to house all the Federal and Territorial offices, which are at present widely scattered throughout Juneau. An insufficient appropriation is available, made at the time when no need for legislative chambers existed. An additional appropriation was asked for but failed of passage. During the war I do not urge the spending of any large sums of money or the diversion of needed labor from other forms of employment, but I do urge that the Supervising Architect of the Treasury Department be requested to prepare plans and estimates so that when the time is propitious, Congress may be asked to furnish the requisite additional funds with which to erect a building suited to the present and future needs of the Territory.

At present the office of the governor consists of a cheaply constructed house erected over 30 years ago as an Indian school. As an engineer, I condemn it absolutely as unsafe for human occupancy. It is my understanding that last winter its use had to be abandoned several times during the cold weather and for periods lasting as long as three weeks. To make the office habitable would require as great an outlay of money as to erect a new building better suited to the purpose. I think it will be neither possible nor safe to maintain the office in its present location for any length of time, as the first winter gale may blow it down.

The executive mansion is a large, handsome, inadequately furnished house, the third floor of which has never been finished. Some of the furniture is badly in need of repair, but by decision of the Comptroller of the Treasury, funds appropriated for the upkeep of the mansion can not be used for the repair of Government furniture. It will, therefore, probably be necessary to purchase a certain amount of new furniture.



The grounds surrounding the mansion had never received attention until an appropriation of \$2,500 made by the legislature for the purpose was utilized during the summer. The grounds are now inclosed by a neat fence, the terrace has been smoothed off and sodded, concrete walks have been put in, a new concrete driveway laid, and a flagstaff set up. The house has received a greatly needed repainting, for which purpose \$750 was appropriated at the last session of Congress.

#### TERRITORIAL BANKS.

At the close of the fiscal year covered by this report there were 16 Territorial banks and 3 national banks in the Territory, the same number as at the close of the previous year. While new banks were established at Fairbanks and Cordova during the year, there was one failure, a bank in Fairbanks having been closed in August, 1917, by the Territorial banking board. The bank was a small institution and, while the depositors will suffer some loss, there are no heavy individual losers. The Bank of Ruby, after slightly more than a year's existence, voluntarily liquidated its affairs, its backers feeling that the amount of business offered did not justify a longer continuance in business.

The Territorial banking board, composed of the governor, the secretary and the treasurer of the Territory, continued its supervision over Territorial banking institutions. All such were examined during the year and made reports of condition and published statements, under call, as required by law. Territorial banks are located at Ketchikan, Wrangell, Petersburg, Douglas, Juneau, Skagway, Cordova (2), Valdez, Seward, Anchorage (2), Nome (2), Iditarod, and Fairbanks. National banks are located at Juneau, Seward, and Fairbanks. The deposits in the various Territorial banks at call of May 8, 1918, aggregated \$5,974,728.82, as compared with \$5,742,790.30, under corresponding call of the year previous. The gain shown, though small, is none the less gratifying in view of the business depression existing in many parts of the Territory, due to prevailing war-time conditions. The combined capital of these banks is \$650,000, as compared with \$615,000 of the year previous. The total surplus and undivided profits amount to \$249,914.36, as compared with \$240,993.41 of the year previous.

#### LABOR CONDITIONS.

It is safe to say that every industry in the Territory is suffering from a shortage of labor. Mines, mills, fisheries, shops, and railroads are all working shorthanded. Peak production everywhere has been rendered impossible. In many instances men have given up good wages with continuous employment, urged to other environments by the national restlessness. The Alaskan is naturally adventurous and excitement loving. The bustle of the war industries, the turmoil of the passing show, and the great desire to be of some direct service to the Government have sounded a call too loud to resist. Every south-bound steamer is loaded to capacity with passengers and those north-bound are pitifully empty. And withal the opportunity for the

laboring man in Alaska is as good as in any of the towns of the Pacific States, with their high rentals and catch-penny temptations. There have been a few labor disturbances; in May the salmon fishermen voiced their discontent over the prices fixed on fish. They claimed the price paid for salmon was too low, and the difference paid for fish caught with independent boat, gear, and fuel, and for fish caught with company boat, gear, and fuel not equitable. Hearings were held by both the food administrator and by the governor. An amicable settlement of both questions was effected.

At Nome the production of gold was seriously interfered with by strike. The Territorial legislature of 1917 passed an eight-hour law which provided for an eight-hour day and no more, with no provision for overtime. When brought before the district court of the fourth judicial division, the judge decided the act to be unconstitutional. An attempt was made to have an appeal perfected on writ of error. By order of the Attorney General of the United States, the district attorney of the fourth judicial division was not permitted to enter the appeal and all district attorneys of the four judicial divisions instructed not to enter any suit under the act. Later the attorney general of the Territory essayed to appear for the United States as provided for by Territorial law but this attempt was also denied by the Department of Justice. The striking miners' union at Nome contended that the Attorney General had no authority to deny an appeal and remained on strike throughout the entire placer mining season, at the same time expressing a determination to maintain the law until definitely expunged from the statute books by a decision of the highest court. A conciliator of the Department of Labor sent to Nome for the purpose was unable to arrange an agreement between the gold mining operators and the strikers, the strikers holding out for an eight-hour day as explained and the principal operators holding firm to a longer day on a straight hourly basis without the time-and-a-half overtime feature, on the ground that placer mining with all the additional war-time costs would be unprofitable. An expression from various Alaskan unions showed considerable variance of opinion. The sentiment for a straight eight-hour day and for an eight-hour day with time-and-a-half overtime, especially during war time, being about equally divided, as is the sentiment regarding the validity of the court's decision. It is to be regretted that an appeal was not allowed to be taken as, until the question is settled definitely for all time, there will be a recrudescence of labor disturbance. Under a term of the act regulating the hours of labor, the governor is given the power to suspend or modify the provisions of the law for the period of the war, when requested by the Secretary of the Interior or by the Council of National Defense. Acting under given authority the governor, my predecessor, under the dates of December 15, 1917, January 7, 1918, and April 5, 1918, suspended the workings of the law as applied to the fisheries for a period of one year from date of order and not longer unless the war shall not have been terminated within that time. Unless the legislature of the Territory will voluntarily amend the law or unless the Department of Justice will allow of an appeal, I look for continued labor unrest.

## BONE-DRY ALASKA.

Prohibition in Alaska has been productive of most beneficial effects. I doubt if even those most opposed to prohibition would now be willing to return to the old régime. It is probably true that immediately before the shipment of liquor to Alaska was prohibited, large quantities of distilled and fermented liquor were imported for future illicit sale when the Territory should go dry. These "caches" have largely been either consumed or seized. "Bootlegging" is still in evidence but is becoming steadily less and less. The special employees for the suppression of liquor traffic among the natives since the advent of prohibition are now used in the suppression of all liquor traffic. I think the employment of agents for the suppression of the liquor traffic should be continued, owing to the fact that the distilling of "hootch" is not yet a lost art and undoubtedly there are a few illicit stills and breweries scattered about in secret places. On the whole the special agents have rendered effective service and have seized thousands of gallons of distilled liquor, wine, and beer.

It is evident that the necessity of preparing proper reports has not been sufficiently impressed upon these special employees, but from the fragmentary reports to hand it would seem that there have been the following number of arrests and convictions in the several divisions: First judicial division, 58 arrests and 50 convictions; second judicial division, 2 arrests and 2 convictions; third judicial division, 16 arrests and 14 convictions; fourth judicial division, 34 arrests and 17 convictions; a total of 110 arrests and 83 convictions.

## TERRITORIAL BUREAU OF PUBLICITY.

The Territorial legislature of 1917 provided for a Territorial bureau of publicity, which has since been systematized and is now maintaining a central office at Juneau, the capital, from which literature advertising the Territory and its various resources is being largely distributed throughout the United States in particular and the world in general. The literature being distributed as the result of advertisements being placed in leading publications is descriptive of the resources of Alaska and includes everything that prospective homeseekers and investors may desire to learn. Many letters of inquiry for information and literature are received by this bureau and its maintenance and operation is doing much toward enlightening "outsiders" as to the resources and possibilities of Alaska.

In connection with the Territorial bureau of publicity a central labor bureau is being maintained and is doing much toward a general distribution of labor, as well as proving a convenience to those seeking employment in the various industries of the Territory.

The act which authorized the bureau of publicity carried with it an appropriation amounting to \$15,000 to cover the two years which would intervene before another session of the Territorial legislature convened. Of this amount approximately \$3,000 was expended last year, principally in salaries and printing, but no system of advertising or distributing the printed matter was inaugurated until the present year, when an office was opened and its purposes generally made known. The result is that its force is now kept busy answering the many letters of inquiry received and sending out pamphlets containing the information sought.

## FOOD ADMINISTRATION.

The present organization consists of a staff comprising a Federal food administrator, an assistant Federal food administrator, executive secretary and educational director, director of home economics, director of religious and fraternal organizations, director of salmon division, director of fresh fish division, merchants' representative, representative of restaurants and hotels, library director, commercial traveling men's representative, statistician, and 110 divisional, district, and local food administrators, with headquarters in all of the principal towns and camps of the Territory. Adequate quarters are maintained in the Seward Building, Juneau, with a clerical force sufficient to dispatch the great volume of business incident to the food-conservation program during the war.

Among the important work done by the Alaska food administration has been the sending out of all rules and regulations, pamphlets, recipes, conducting all correspondence, and distributing literature and general and local news stories pertaining to the food-conservation program, as outlined by the United States Food Administration, together with numerous rules and regulations and food news which, from time to time, have been prepared by the Federal food administrator for Alaska.

The food administration of Alaska held many conferences this season with packers, cannery men, and fishermen relative to the price to be paid for Alaska salmon. Recommendations were made to the United States Food Administration and maximum prices to be paid were announced in May. A revision of these prices, based upon the point of delivery, was effected by the food administrator in July; also numerous questions arising out of the fishing industry of Alaska with reference to the prices fixed have been determined as the result of conferences with fishermen and cannery men. Questions of this character are continually arising and they are daily being adjusted. All of the salt-water fishermen in Alaska have been issued fishing licenses and a vast amount of correspondence carried on in this connection—the matter of proper persons to receive these licenses being an important question and entailing many investigations.

The matter of a reasonable profit for buyers and dealers in rough fish of Alaska was taken up with all concerned, and prices yielding a fair profit to all were announced.

Sundry conferences with reference to the prices to be announced by the food administration for canned salmon in Alaska were held, and recommendations forwarded to the food administration.

Alaska's food administration was partially instrumental in obtaining permission from the Government for foreign bottoms to haul fish between Alaska and mainland ports; also the matter of establishing a more satisfactory steamship service was agitated.

Steamship companies plying to the westward agreed, upon a showing made by the food administration to reduce their rate on potatoes grown in the Matanuska section to points in southeastern and western Alaska, from \$12 a ton to \$4 a ton. This reduction has enabled Alaska's farmers to move many tons of potatoes at a price less than merchants have had to pay for this food commodity shipped in from the States.

Price-interpreting committees have been established and what are considered "reasonable prices" are published. These lists have proved valuable to consumers. The Juneau office has acted as a clearing house for all reports from licensees, has issued special permits for sugar and flour and investigated applications for licenses. The entire Territory has been reached frequently with urgent appeals for the conservation of essential foodstuffs and the results obtained have been most gratifying.

Food clubs have been established in many of the larger cities of the Territory. These organizations have accomplished much in the way of holding meetings and devising plans for householders to conserve essential foods, sending out tested recipes, literature, etc.

Provisions have been made for supplying the Siberian coast trade with foodstuffs for the winter and special rules and regulations from time to time have been announced to cover various sections of the Territory, owing to inadequate transportation facilities and adverse climatic conditions.

The presence of two subchasers in Alaskan waters until the salmon pack is up has been continued until October 15, partly as the result of efforts by the Food Administration office.

A very appreciable stimulus to war gardens has been brought about through the food administration of Alaska and all over the Territory many successful war gardens were the result this season.

Alaska during the wheat-saving campaign established a wonderful record. Its per capita consumption was less than that asked by the food administration. The individual allowance had been fixed at  $1\frac{1}{2}$  pounds of wheat flour per person per week. A checking up of returns showed that Alaska's per capita consumption during the wheat-saving campaign did not reach 5 pounds per month.

As a result of willing cooperation, patriotism, and economy in the matter of saving certain meat products, such as pork, beef, etc., an excellent record was also made by Alaskans and is still being maintained. A vigorous campaign for the conservation of these essential foodstuffs has been continuously kept up and is now being conducted by our educational department.

In southeastern Alaska and in westward Alaska the sugar ration cards have been put into effect and are resulting in a large saving of sugar; and a special permit system controlling purchases by dealers, bakers, and public eating places and manufacturers is now in force, also conserving a large amount of sugar.

A number of miscellaneous matters, such as stimulating production, creating a demand for fish other than salmon, aiding in the preservation of the fish of the Territory, securing the cooperation of dealers other than those handling foodstuffs in carrying out the food program, etc., have been handled by the Alaska food administration.

The cooperation and willingness of Alaskans to comply with the regulations of the food administration as a whole has been most gratifying.

#### PUBLIC LAND.

During the year 16 townships, whole and fractional, of the Seward meridian, and 10 townships, whole and fractional, of the Fairbanks meridian, were surveyed.

There have been surveyed to date the following township surveys, whole and fractional, viz, Seward meridian 71, Fairbanks meridian 32, and Copper River meridian 18.

The survey should be further extended in the Susitna and Tanana Valleys. The necessity of surveying other sections is also apparent. There are approximately 100 square miles of agricultural land in the Chilkat River Valley, and there are at least 50 homesteaders, some of them having as much as 30 acres under cultivation. Their products are shipped to all parts of southeastern Alaska and even to Seattle, Wash.

There are also a number of settlers in the Eagle River Valley, where the advantages of settlement are equally as good as in the Chilkat Valley. On Kodiak Island it has been demonstrated that stock can be profitably raised, for there is an abundance of red top and other nutritious grasses. Similar conditions prevail on the islands of the Aleutian and Alexander Archipelagoes and in many of the valleys of the coast of southwestern and southeastern Alaska. There is some demand for surveys in the valley of the Kuskokwim.

The method of making surveys in Alaska is as follows: The department directs that a certain survey be made; the surveyor general is requested to prepare and issue instructions for its execution, and these are handed to the assistant supervisor of surveys to be handed by him to the United States surveyor he designates. Upon the completion of the survey the returns are filed with the surveyor general.

By an act (Public No. 180, 65th Cong., H. R. 8563) approved June 28, 1918, a settler who has used his homestead right in a State or other territory is no longer barred from making homestead entry on surveyed or unsurveyed land in Alaska. The same act provides that when an entryman has shown satisfactory evidence of compliance with the terms of the homestead law the surveyor general will issue instructions for the survey of the land entered, not later than the next succeeding surveying season, without expense to the entryman. This act of course applies only to public lands. A settler within the confines of a forest reserve must first have his land clear-listed by the Forestry Service to the General Land Office, a process which is now carried through with reasonable dispatch. It is to be regretted in this connection that the national forests of Alaska can not be merged with the public lands, as there is no function of the Forestry Service being performed in Alaska in connection with the forests which can not be performed by the General Land Office without duplication of expense.

Much could be gained by the reorganization of the Land Service in Alaska to the end that the duties now performed by the four distinct branches of that service, operating in this Territory, may be handled by one officer. This bureau is now operating in the Territory through a surveyor general, an assistant supervisor of surveys, chief of field division, and three local offices, located at Juneau, Nome, and Fairbanks, respectively, each of which latter offices are presided over by a register and receiver. All of these branches are independent of one another and deal directly with the General Land Office in Washington, frequently about the same matter, without the other being aware of what is taking place.

The consolidation of this work under one head would make an immediate saving in salaries, permit of the greater availability of

field and office force of these various branches, make possible a more economical utilization of office space with a consequent reduction of rent, the keeping of one set of records instead of four, etc. Aside, however, from any matter of financial consideration, the paramount benefit of the proposed reorganization is the efficiency that would be secured by responsible local control. The people in the Territory are far away from Washington, and their problems are so distinct from those in the States that they are entitled to a single officer with whom they can deal, who can speak authoritatively for the General Land Office, instead of the present divided authority, which makes practically every land claim the subject of consideration by four distinct branches of that bureau. When it is realized that 99 per cent of this Territory belongs to the Federal Government, and to a large extent is under the jurisdiction of the Land Department, the vital necessity of an efficient, centralized organization for that service becomes apparent.

#### NAVAL PATROL.

On account of seemingly well-substantiated rumors of I. W. W. and pro-German threats against the industries of Alaska, and particularly against the fish canneries, the Navy Department established a patrol in Alaskan waters, to last during the fishing and packing season. Four small ships, each carrying a naval intelligence officer and an officer of the Department of Justice, were detailed as follows: U. S. S. *Patterson*, formerly of the Coast and Geodetic Survey, to Bristol Bay; U. S. S. *Explorer*, also formerly of the Coast and Geodetic Survey, to Prince William Sound; submarine chaser 309 to southeastern Alaska, with headquarters at Juneau; submarine chaser 310 to southeastern Alaska, with headquarters at Ketchikan. These four patrol boats are rendering most excellent service. Every cannery has been visited, all I. W. W. and alleged pro-Germans have been interviewed, and several arrests of dangerous characters made. One German arrested had formulae and material for making high explosives. Through the assistance of the patrol a number of slackers have been brought in. The presence of the patrol has without doubt kept in check proposed outbreaks of disloyalty and destruction of property, which would have injured the fisheries at a time when the United States is in need of their products, and has lent confidence and encouragement to operators in isolated localities. The patrol should be returned to Alaska about April 15 of next year.

Through the courtesy of Rear Admiral R. E. Coontz, commandant of the thirteenth naval district, plans have been drawn and estimates made for a ship for general duty in Alaska. There should be permanently stationed in Territorial waters, with headquarters at Juneau, such a ship, capable of performing patrol duty of all kinds. There is constant need of a vessel of this type, not only as a means of enforcing Federal and Territorial law, but also for performing rescue work. The estimated cost is \$60,000.

#### PATRIOTIC ENDEAVOR.

Alaskans may well be proud of the showing made in drives for the various Liberty loans, War-Savings Stamps, and the American Red Cross. Little can be ascertained as to the amount subscribed to the

first Liberty loan, although it is known that a considerable amount was taken, Fairbanks subscribing over \$80,000 and Juneau over \$26,000. In the second loan \$1,059,100 was subscribed, and in the third loan, with a quota of \$687,828, subscriptions of \$1,743,050 were entered, or practically 253 per cent of the quota, thus leading all the States and Territories in proportion to the allotment, except Delaware, with its large war industries. On June 30, Alaska led all the States and Territories in the per capita purchase of War-Savings Stamps. Alaskans pin their faith to the great American Red Cross, although all worthy charities have received liberal subscriptions. In the membership drive in December, 1917, memberships were taken out to the extent of 94 per cent of the white population. In the second war fund campaign in May, 1918, with 18,090 subscribers the sum of \$147,398.64 was raised, with a number of distant places still to be heard from, thus again leading all the States and Territories in per capita subscriptions. Alaska can not be excelled by any State or Territory in per capita patriotism.

For the sale of the wool, from the White House sheep, donated by President Wilson, Alaska returned \$5,881.70 for 1½ pounds, once more leading the States and Territories, the nearest competitors being Nebraska, with \$5,000 and Porto Rico with \$4,000. If, in proportion to population, the United States should have as many men in military service as has Alaska, there would now be an Army of approximately 10,000,000 men.

#### INCORPORATED TOWNS.

There are 17 incorporated towns listed as such with the secretary of the Territory, but the town organization of Chena seems to have died of inanition, practically all of the inhabitants having moved away. Reports received from 13 of these towns show a total assessed valuation of \$14,777,646. The rate of taxation on assessed valuation for these towns ranged from 1 to 2 per cent, the average being 1.7 per cent.

#### *Assessed valuation and rate of taxation, 1917.*

Town.	Assessed valuation.	Rate of taxation.	Town.	Assessed valuation.	Rate of taxation.
		<i>Per cent.</i>			<i>Per cent.</i>
Chena.....	( <sup>1</sup> )	( <sup>1</sup> )	Nome.....	\$1,300,390	2
Cordova.....	\$1,184,545	2	Petersburg.....	355,330	1
Douglas.....	481,816	1.5	Seward.....	1,721,800	1.8
Eagle.....	25,874	2	Sitka.....	164,910	1
Fairbanks.....	2,061,134	1.5	Skagway.....	625,727	1.5
Haines.....	( <sup>1</sup> )	( <sup>1</sup> )	Tanana.....	( <sup>1</sup> )	( <sup>1</sup> )
Iditarod.....	( <sup>1</sup> )	( <sup>1</sup> )	Valdez.....	779,000	2
Juneau.....	3,730,768	1.6	Wrangell.....	217,527	2
Ketchikan.....	1,228,825	1.75			

<sup>1</sup> No valuation made and no tax levied.

#### WEATHER CONDITIONS.

The year ended June 30, 1918, was characterized by a general deficiency in temperature in all parts of Alaska in which records are kept, with the exception of the Aleutian Islands, where there was an



average daily excess of about  $1^{\circ}$ . The deficiency was greatest over the Yukon Valley and Seward Peninsula, where it averaged from  $3.5^{\circ}$  to over  $5^{\circ}$  per day. In the southeastern section only the months of November and January were decidedly warmer than usual, while in the interior valleys August, September, and January were the warm months.

The summer months, as usual, were pleasant and devoid of oppressive heat, the highest temperature officially registered being  $88^{\circ}$  in August in the Tanana Valley. While continued cold weather prevailed in the interior during the winter, and the lowest official reading was  $-67^{\circ}$ , the Pacific coast districts enjoyed comparatively mild temperatures, the minimum readings for the year being but little below zero, though at a number of places they did not reach zero. This is in marked contrast to conditions in the central valleys of the States, where the lowest readings during the winter ranged from  $-10^{\circ}$  to  $-40^{\circ}$ .

Under the warm weather that prevailed in August and early September in the Yukon Valley, vegetation in that district made rapid growth and overcame the setback it had received earlier in the season. In the middle Yukon and Tanana Valleys the first freezing temperatures of the autumn occurred generally between September 6 and 14; in the Matanuska Valley on the 16th, while in the southeast and in parts of the Pacific coast vegetation was not materially damaged by frosts until October 15 and 16.

As all of the spring months of 1918 averaged below normal in temperature, the early part of the season was backward, and the growth of crops was retarded even more than was the case in the spring of 1917. In the Tanana Valley it was not until about May 23 that field work was possible on southern slopes. The last freezing temperatures of the season occurred generally in the southeast and Matanuska Valley between May 23 and 26; in the lower Kuskokwim Valley on May 31; and in the Yukon Valley and Bering Sea region between the 10th and 30th of June.

One of the outstanding features of the weather of the year was the continued low temperatures that prevailed in the interior valleys and Seward Peninsula in November and December. While the absolute minimum readings recorded during this period did not reach previous low records by several degrees, the persistence day after day and week after week of temperatures that were much below normal made the winter in those districts one long to be remembered. The cold was most severe in the upper Yukon Valley, Fort Yukon having a mean for December of  $-48.4^{\circ}$ . Still colder weather obtained in Yukon Territory, Dawson having a December mean of  $-51.3^{\circ}$ .

The year was one of abundant precipitation in the southeast, especially during the latter half of 1917. October and November were noteworthy in that section for their frequent and heavy rains and snows. Previous high records for monthly totals were broken at several stations, among them Sitka with 20.73 inches in October, and Ketchikan with 53.85 inches and Jumbo Mine with 61.46 inches in November. These figures, of course, include rain and melted snow.

Heavy local rains occurred in the Tanana Valley in July and retarded construction work on the Government railroad in that region, while excessive rains over Kenai Peninsula on September 9 and 10

occasioned damage to property in Seward and vicinity aggregating approximately \$100,000.

In the interior the last five months of 1917 were comparatively dry, with an unusual amount of clear weather. In some districts, particularly the Kuskokwim and lower Yukon Valleys and Seward Peninsula, practically no snow fell until January, and as a result transportation was carried on with the greatest difficulty by reason of the almost bare trails. There was an abundance of snowfall, however, in the late winter and early spring of 1918 in practically all parts of the Territory, but May and June had somewhat less than the normal amount of rainfall.

Navigation on inland waterways ceased in October. The Koyukuk was closed by ice on October 17, the Tanana between the 20th and 24th, the Kuskokwim between the 22d and 27th, and the Yukon from the 27th to the 31st. St. Michael Bay closed on October 31, and the roadstead at Nome on November 18. In the spring of 1918 the breakup began in the Tanana on May 10; in the Yukon at Eagle on the 11th, the date advancing to the 25th at Holy Cross; in the Koyukuk on the 27th; the lower Kuskokwim on the 19th; the Noatak on the 28th; and the lower Kobuk on June 2. The extreme cold weather of November and December with scarcely any snow resulted in the ice in the rivers freezing to unusual depths, which in turn caused the formation of unusually large gorges during the breakup. The highest water known in years was experienced at a number of places along the Yukon, Tanana, Koyukuk, and Kuskokwim. In the last-named valley the whole country in the vicinity of Akiak was inundated, the river rising to a stage of 25 feet above ordinary low water.

The ice in the Bering Sea remained much later than usual, and it was not until June 25 that ocean steamers were able to reach Nome. The ice discharge from the Nushagak and Kvichak Rivers blockaded Bristol Bay to an unusually late date. A number of vessels carrying supplies and labor to the canneries on the Bristol Bay coast were caught in the ice fields, one vessel being lost and others damaged. Three men lost their lives in making their way over the ice floes.

The following table gives the mean temperature at representative stations in the several sections of the Territory for each month of the year. Similar data for Minneapolis, Minn., are given by way of comparison.

Mean temperatures: July, 1917, to June, 1918.

Stations.	Section.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.
Eagle.....	Yukon Valley.....	55.8	54.6	45.0	23.2	-10.8	-45.8	-10.8	-10.1	-4.2	25.2	43.7	52.6
Rampart.....	do.....	59.2	58.2	44.6	24.4	-13.8	-34.2	-15.2	-5.7	1.6	24.0	43.3	57.6
Fairbanks.....	Tanana Valley.....	55.9	55.2	44.6	24.4	-10.2	-33.3	-9.6	-3	1.2	29.6	42.6	55.2
Nenana.....	do.....	56.2	55.8	45.0	24.2	-10.4	-30.4	-11.3	1.0	1.0	24.0	43.8	58.0
Nome.....	Seward Peninsula.....	50.2	51.6	41.0	28.8	2.8	2.1	1.8	1.3	3.4	11.5	31.6	39.6
Akiak.....	Kuskokwim Valley.....	53.6	50.8	47.9	27.9	-7.1	-7.6	1.5	6.6	9.4	20.1	39.4	54.0
Dutch Harbor.....	Aleutian Islands.....	55.0	55.3	46.4	42.2	29.4	32.8	31.0	31.8	34.6	36.4	44.0	46.4
Anchorage.....	Cook Inlet.....	55.3	56.6	45.3	33.3	15.2	-9.2	12.0	12.7	15.8	31.5	44.4	52.6
Matanuska.....	Matanuska Valley.....	52.7	54.6	45.5	32.6	13.8	-5.6	10.6	12.4	15.9	33.2	44.4	55.6
Juneau.....	Southeast.....	53.3	55.5	51.8	42.2	37.4	14.6	30.1	27.4	27.6	37.8	45.8	54.0
Sitka.....	do.....	53.0	57.4	60.0	44.0	40.6	27.8	35.5	33.0	33.4	38.8	45.6	51.8
Minneapolis.....	Minnesota.....	73.0	67.4	60.0	38.6	38.8	9.9	4.0	18.0	39.0	44.2	60.1	66.8

## SCHOOLS.

The public schools of Alaska are administered under both Federal and Territorial laws. The Federal law, known as the Nelson law, provides for schools outside of incorporated towns or incorporated school districts, and receives for their maintenance 25 per cent of the Alaska fund. The Territorial laws provide for schools in incorporated towns or districts, one-fourth of the cost of maintenance being borne by the town or district by taxation of real and personal property and three-fourths by the Territory. As an experiment in the Americanization of foreigners, the Territorial legislature of 1917 passed an act for citizenship night schools, carrying an appropriation of \$5,000, to be expended under the direction of the United States judges of the four judicial divisions. The experiment has proved a success. Not only are foreigners, many of whom are illiterate, being given elementary educational instruction, but are also being taught American ideals. A large number of foreigners, particularly Serbs, have returned to Europe from Alaska to enter the armies of their mother countries. They have told me that only lately have they understood the principles for which their countries are at war and that they now wish to fight to uphold the ideals, the meaning of which they have been taught to understand. I attribute this sentiment largely to the influence of the citizenship night schools.

The people of Alaska are intensely interested in their schools, the more so as many brought up on the outskirts of civilization were themselves not given the opportunity for educational advancement and wish to see this defect remedied in their children. On a whole, the schools are well organized with efficient and earnest instructors. In order that the scholarship of the public-school children might be tested and compared with that of average groups in the States, certain tests were given throughout the year. An examination of tabulated results shows that the scholarship of Alaskan children is well above the average. The vast majority of the teachers in Alaska have two qualifications which make for successful school work in this country where direct supervision of schools is necessarily limited—these are professional training and experience. Two-thirds of the teachers of Alaska are normal school or college graduates; 88 per cent of the high-school teachers are college graduates who have in addition had advance study. The average teaching experience of Alaska teachers is seven and one-half years, exclusive of the school year for which the report is made. While statistics on the subject are not now available, I believe that no State in the Union can present a record of teachers so well qualified by professional training and experience as those of Alaska.

The great war has brought out the need for heretofore neglected patriotic instruction. In common with the rest of the Nation, we have perhaps been lax. We have not noted that we were slipping in patriotic endeavor. We have learned how insidious has been German propaganda in its attempt to destroy our American ideals. In Alaska, at least, never again shall our school children lack for instruction in patriotism and reverence for our flag. All pupils receive such instruction with the result that Alaska has an enviable record in the amount of war service rendered by her public-school system. The schools are enthusiastic in their support of all war

measures; the Junior Red Cross, Food Administration, War Savings, War Gardens. In three of the larger schools having an average daily attendance of 628, war securities to the amount of \$29,509.50 were purchased during the school year. Statistics covering all of the schools are not available.

*Statistics of white schools outside of incorporated towns for the school year 1917-18.*

Location.	Number of teachers.	Pupils of school age.	Cost of maintenance.	Term (months).
Afognak.....	3	79	\$3,715.06	9
Blackburn.....	1	11	1,546.84	9
Candle.....	1	15	2,508.13	9
Charcoal Point.....	1	33	1,379.42	9
Chatanika.....	1	17	1,975.00	9
Chichagof.....	1	13	1,071.23	9
Chitina.....	1	13	1,386.90	9
Council.....	1	14	2,484.38	9
Craig.....	1	22	1,272.81	9
Deering.....	1	8	3,550.00	8
Eagle River.....	1	5	854.25	6
Ellamar.....	1	17	1,584.75	9
Finger Lake.....	1	7	2,917.59	6
Fortuna Bedge.....	1	18	3,600.00	8
Fox.....	1	14	2,058.50	9
Garden Island.....	1	15	1,970.67	9
Hadley.....	1	8	1,091.32	9
Hope.....	1	15	1,232.15	9
Kasaan.....	1	25	1,306.00	8
Katalla.....	1	19	1,526.97	9
Kenai.....	3	106	5,682.58	9
Kiana.....	1	18	2,581.23	9
Knik.....	1	8	1,370.05	9
Kodiak.....	4	93	5,437.50	9
Latouche.....	1	36	1,745.14	9
Longwood.....	2	51	2,559.10	9
Loring.....	1	21	1,047.50	7
Mendenhall.....	1	10	798.70	6
McCarthy.....	1	24	2,065.17	9
Ninilichik.....	1	22	1,881.05	9
Nushagak.....	1	21	1,248.50	9
Otter.....	1	22	2,534.09	9
Ouzinkie.....	1	23	1,313.16	9
Perseverance.....	1	13	1,717.55	9
Ruby.....	1	20	3,740.38	9
St. Michael.....	1	18	2,618.87	9
Sanak.....	1	16	1,953.93	9
Scow Bay.....	1	23	1,102.08	9
Seldovia.....	1	39	1,658.85	9
Sitka.....	3	59	3,792.45	9
Teller.....	1	19	1,765.70	9
Tenakee.....	1	21	1,250.80	8
Thane.....	2	15	2,893.53	9
Treadwell.....	2	58	3,071.75	9
Unga.....	1	28	2,350.34	9
Wadilla.....	1	10	2,864.77	8
<b>Total.....</b>	<b>58</b>	<b>1,162</b>	<b>100,046.84</b>	<b>.....</b>

For the year 1917-18 schools were maintained in 46 districts outside of incorporated towns and incorporated school districts. Eight new school districts were established during the year, three of which, however, did not open their sessions prior to the close of the school year. The 46 schools maintained during the year 1917-18 employed 58 teachers and had an enrollment of 1,180, as compared with 1,364 the previous year. The average number of pupils per school was 25.6, as compared with 34.1 the previous year. A total of \$100,046.84 was expended for maintenance, at an average cost of \$2,174.93 per school, as compared to \$1,993.50 for the previous year. The average cost per pupil was \$84.79, as compared with \$58.46 for the previous year.

## SCHOOLS IN INCORPORATED TOWNS AND INCORPORATED DISTRICTS.

There are 15 schools in incorporated towns and 3 in incorporated school districts, supported in part by territorial appropriation. The averages for the 18 schools, as shown by the table of statistics, is as follows: Average number of teachers, 4.8, with average yearly salary of \$1,205.26 per teacher; average enrollment 120; average daily attendance, 94.2; average cost of maintenance, exclusive of teachers' salaries, \$3,777.82. The average cost per pupil was \$80.14, as compared with \$76.84 for the previous year.

*Statistics of white schools for the school year 1917-18.*

Location.	Number of teachers.	Total enrollment.	A average daily attendance.	Term (mos.).	Grade school graduates.	High school graduates.	Expenditures.		
							Salaries of teachers.	All other.	Total.
<i>In incorporated towns.</i>									
Cordova.....	4	106	71.70	9	4	.....	\$5,220.00	\$7,669.59	\$12,889.59
Douglas.....	9	206	171.40	9	12	4	9,005.04	4,172.65	13,177.69
Eagle.....	1	11	8.81	7	1	.....	840.00	408.75	1,248.75
Fairbanks.....	8	205	181.60	9	19	7	15,189.75	5,640.10	20,829.85
Haines.....	2	46	31.00	9	2	.....	1,800.00	518.28	2,318.28
Iditarod.....	1	8	8.00	9	.....	.....	1,350.00	380.78	1,730.78
Juneau.....	14	348	271.28	9	21	13	16,490.00	7,744.24	24,234.24
Ketchikan.....	9	254	194.70	9	13	2	10,665.00	4,693.47	15,358.47
Nome.....	6	127	92.90	9	5	1	8,775.00	4,429.97	13,204.97
Petersburg.....	4	91	71.92	9	4	.....	3,915.00	2,922.75	6,837.75
Seward.....	4	108	84.00	9	5	.....	4,725.00	2,416.45	7,141.45
Skagway.....	5	122	96.30	10	.....	.....	4,005.00	4,264.00	8,269.00
Tanana.....	1	17	14.00	9	.....	.....	1,800.00	564.22	2,364.22
Valdez.....	5	101	64.00	10	3	2	4,950.00	4,273.35	9,223.35
Wrangell.....	4	102	79.20	9	4	.....	3,780.00	1,605.85	5,385.85
Total.....	77	1,847	1,440.81	.....	93	29	92,509.79	51,704.45	144,214.22
<i>In incorporated school districts.</i>									
Anchorage.....	8	274	219.6	9	14	.....	10,332.50	12,054.82	22,387.32
Nenana.....	1	28	27.1	8	3	.....	1,415.00	3,994.09	5,409.09
Talkeetna.....	1	8	8.0	6	2	.....	600.00	247.43	847.43
Total.....	10	310	254.7	.....	19	.....	12,347.50	16,296.34	28,643.84
Grand total.....	87	2,157	1,695.51	.....	112	29	104,857.49	68,000.79	172,858.08

## CITIZENSHIP NIGHT SCHOOLS.

Night schools had been organized in two of the cities of Alaska prior to the 1917-18 school year. The passage of the citizenship night-school law as contained in chapter 33, 1917 session laws and the appropriation of \$5,000 for carrying out its provisions during the period ending March 31, 1919, however, gave a new impetus to this branch of educational activity. Six communities organized under its provisions and received Territorial appropriations amounting in all to \$2,913.31. In addition to undertaking work of the scope permitted under the law referred to, several communities conducted night schools, which offered a greater variety of subjects and which attracted a larger enrollment than would have been possible with the limited amount of money available from the Territory. In all, seven schools were organized. No reports are available from one, so the general statistics appearing below cover but five citizenship night schools and six general night schools.

*Citizenship night schools.*

School.	Enrollment.		Average attendance.		Sessions weekly.	Number weeks.	Expenditures.
	Men.	Women.	Men.	Women.			
Anchorage.....	100	50	50	25	5	24	\$1,244.90
Douglas.....	6	19	5	11	2	24	375.00
Juneau.....	20	11	8	5	3	20	378.66
Ketchikan.....	27	17	11	10	2	15	397.00
Nenana.....	46	3	39	3	5	16	480.00
Nome (no report).....							400.00
<b>Total.....</b>	<b>199</b>	<b>100</b>	<b>113</b>	<b>54</b>			<b>3,277.56</b>

The difference between the total expenditure, \$3,277.56, and the amount received from the Territory, \$2,913.31, represents money collected from tuition fees, etc., for the support of these schools.

Different subjects offered: Reading, writing, spelling, arithmetic, English, United States history, United States civics, public speaking.

Different nationalities represented: (24) American, Alaska native, Austrian, Bohemian, Bulgarian, Canadian, Danish, Dutch, Finnish, French, German, Greek, Irish, Italian, Japanese, Mexican, Montenegrin, Negro, Norwegian, Russian, Scotch, Serbian, Swedish, Swiss.

*General night schools, including citizenship night schools.*

School.	Enrollment.		Average attendance.		Sessions weekly.	Number weeks.	Expenditures.
	Men.	Women.	Men.	Women.			
Anchorage.....	150	83	100	50	5	35	\$1,741.90
Cordova.....		20		19	5	19	350.00
Douglas.....	10	58	8	50	2	24	577.75
Juneau.....	24	33	11	23	3	20	787.41
Ketchikan.....	22	17	11	10	2	15	397.00
Nenana.....	46	3	39	3	5	16	480.00
Nome (no report).....							400.00
<b>Total.....</b>	<b>252</b>	<b>214</b>	<b>169</b>	<b>155</b>			<b>4,734.06</b>

Nationalities represented the same as above.

Subjects the same as above with the addition of French, Spanish, shorthand, typwriting, business English, and mineralogy.

**ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES.**

Chapter 34 of the session laws of 1917 provides for the acceptance of grants of land and money for the Alaska Agricultural College and School of Mines in accordance with the provision of the acts of Congress approved August 30, 1890, and March 4, 1915. Under chapter 62 of the session laws of 1917, providing for the establishment of such college, the sum of \$60,000 is appropriated for construction of buildings and the purchase of equipment. The building, on a site near Fairbanks, set aside for the purpose by Congress, is

now well under way. It is hardly possible that the college will be in operation before next year.

#### ALASKA TELEGRAPH.

The United States Signal Corps of the War Department maintains the Alaska military telegraph and cable system. There are 40 telegraph and cable stations and 11 radio stations. One station at Thompson Pass is closed during the summer and one at Kotlik is closed during the winter. The Navy Department operates 10 radio stations. There are 16 privately owned radio stations and at Noorvik a radio station is operated by the Bureau of Education with Esquimo operators. The Alaskan Engineering Commission has a telegraph line along the Government railroad from Seward to Talkeetna.

The service rendered by the War Department is invaluable and should be extended to take in many localities now almost entirely without communication except through slow and infrequent mails. The necessity of telegraph communication has been particularly noticeable in the execution of the selective draft. Additional service besides assisting in the development of the country would be valuable in performing rescue work and in apprehending the lawbreaker. There should be radio stations immediately at Point Hope, Point Barrow, and on the Kuskokwim and Koyukuk River. A suggestion perhaps worthy of consideration is that Esquimo might be enlisted in the service and trained for permanent duty at the Arctic stations.

#### COMMERCE.

The total commerce of Alaska with the United States for the fiscal year 1918 was \$131,767,788, as compared with \$121,265,947 for 1917, the increase in the export value of sea products being \$12,665,418 of furs \$494,085, of tin \$60,315, and of other unclassified exports \$1,253,001. The decrease in the value of copper shipped was \$12,880,555, gypsum \$42,550, stone and marble \$54,185. The export of domestic and foreign gold and silver from Alaska for 1918 amounted to \$15,134,523, as compared with \$19,801,974 for 1917, a decrease of \$4,667,451.

On imports from the United States the following increases are shown: Coal, \$116,674, lumber \$473,992, hardware and machinery \$7,567,163; provisions \$528,751. Decreases were shown in: Liquor, \$387,716; all other unclassified items, \$2,456,307.

The decrease in the value of copper exported was largely due to curtailment of output due to strikes and decrease in the price of the metal. In gold and silver the decrease is due to the shutting down of many gold mines, owing either to labor shortage or increased costs of labor, material, and supplies.

Sea products not only increased in volume but in value. The increase in value of other imports or exports is due almost entirely to increase in unit prices and not to volume of shipments.

Imports from foreign countries amounted to \$967,532, and exports to foreign countries to \$2,379,705, the total commerce of Alaska for the fiscal year 1918 reaching the sum of \$135,115,025.



There is a steadily increasing trade between Alaska and northern Siberia, which should be fostered. When a government in Siberia becomes firmly established I look for very close trade relations between Nome and that part of Siberia lying between the Gulf of Anadir and Koliuchin Bay.

At present the commerce of Alaska can be considered satisfactory only in the fishing and copper mining industries. The fishing industry is seasonal and does not bring the amount of prosperity to the Territory to be imagined from the size of the figures. A large proportion of workers in the industry come and go with the season. To be of the greatest benefit to Alaska whenever possible cannery crews should be gathered among the native and white residents.

*Domestic merchandise shipped from the United States to Alaska, 1913-1918.*

	Fiscal year ended June 30—					
	1913	1914	1915	1916	1917	1918
Coal.....	\$212,523	\$285,123	\$255,810	\$244,136	\$290,237	\$406,911
Lumber.....	738,717	642,611	712,199	1,050,311	1,343,336	1,817,328
Hardware and machinery.....	4,296,305	5,069,453	4,849,353	6,128,826	10,183,517	17,780,680
Provisions.....	5,316,089	5,645,715	5,314,917	6,301,043	8,363,418	8,882,169
Liquors.....	721,593	645,890	555,144	659,210	862,471	414,756
All others.....	8,894,320	9,630,668	9,106,186	12,118,785	17,454,639	14,998,332
<b>Total.....</b>	<b>20,179,547</b>	<b>21,929,400</b>	<b>20,792,609</b>	<b>26,502,311</b>	<b>38,427,618</b>	<b>44,280,075</b>

<sup>1</sup> Besides the domestic coal above mentioned, foreign coal was imported to the value of \$279,788 in 1913, \$108,355 in 1914, \$141,480 in 1915, \$155,259 in 1916, \$280,687 in 1917, and \$273,510 in 1918.

*Value of merchandise and precious metals shipped from Alaska to the United States, 1914-1918.*

	Fiscal year ended June 30—				
	1914	1915	1916	1917	1918
Fish, salmon, canned and other.....	\$14,219,216	\$18,375,053	\$18,856,625	\$23,229,724	\$43,357,348
Fish, all other.....	982,222	849,796	772,806	1,603,938	2,701,724
Furs.....	701,511	679,850	572,969	711,550	1,205,635
Gypsum.....	100,727	109,995	50,500	62,000	19,490
Stone, including marble.....	127,220	116,930	58,675	110,101	55,916
Oils, animal.....	210,726	298,427	270,503	297,696	737,704
Ore, copper.....	3,876,411	5,182,004	26,488,288	33,098,190	20,217,635
Tin.....	72,734	71,400	79,471	54,147	114,462
Tungsten.....				54,870	19,550
All other.....	1,189,398	1,356,015	1,715,640	1,912,989	3,165,990
<b>Total.....</b>	<b>21,480,066</b>	<b>27,039,470</b>	<b>48,965,477</b>	<b>60,128,205</b>	<b>71,596,414</b>
<b>Domestic gold and silver:</b>					
Gold.....	12,291,672	15,348,666	16,195,635	15,409,529	12,416,660
Silver.....	148,446	263,606	769,962	683,824	711,755
<b>Total.....</b>	<b>12,440,118</b>	<b>15,612,272</b>	<b>16,965,597</b>	<b>16,093,353</b>	<b>13,128,415</b>
<b>Foreign gold and silver:</b>					
Gold.....	3,495,034	4,423,622	2,686,303	3,676,285	2,006,362
Silver.....			11,279	32,236	106
<b>Total.....</b>	<b>3,495,034</b>	<b>4,423,622</b>	<b>2,697,582</b>	<b>3,708,521</b>	<b>2,006,470</b>
<b>Grand total.....</b>	<b>37,415,218</b>	<b>47,075,364</b>	<b>68,618,656</b>	<b>79,937,179</b>	<b>86,730,299</b>

*Total commerce of Alaska for the fiscal year ended June 30, 1918.*

## Shipments of—

Domestic merchandise from the United States to Alaska.....	\$44, 280. 075
Domestic merchandise from Alaska to the United States.....	71, 151. 090
Foreign merchandise from Alaska to the United States.....	443, 324
Domestic gold and silver from the United States to Alaska.....	758, 420
Domestic gold and silver from Alaska to the United States.....	13, 128, 415
Foreign gold and silver from Alaska to the United States.....	2, 006, 464
Total.....	131, 767, 788
Merchandise from foreign ports to Alaska.....	967, 532
Merchandise from Alaska to foreign ports.....	2, 379, 705
Total.....	3, 347, 237
Grand total.....	135, 115, 025

## TERRITORIAL COUNCIL OF NATIONAL DEFENSE.

By executive order the Territorial Council of National Defense was organized by my predecessor on November 28, 1917, consisting of 32 local organizations, the Juneau branch of the council being the advisory body of all the locals. Representative men in all walks of life were chosen and to them given the duty of aligning the Territory back of the Nation for the successful prosecution of the war.

The council has made special endeavor in the matter of keeping alive the spirit of Americanism; they have been untiring in their efforts to make successful the various Liberty loans, war savings stamps, and charitable drives. They have encouraged the citizen soldier by leading in appropriate farewell exercises and in the giving of instructions concerning their legal rights; they have recognized to sorrowing families the appreciation of the Territory for those who have fallen on the field of honor. In every endeavor the hand of the council is evident—encouragement of productive industry and in the unification of the Territory and of the Nation.

## OFFICE OF THE GOVERNOR.

Repeated attention has been directed to the insufficient provision for the pay of the governor's secretary. The position demands that the incumbent must not only be a stenographer and skilled accountant but must also be a man of executive force and tact. Other than a secretary no assistance is provided for the governor by Federal appropriation to handle the immense amount of correspondence and work which comes to the office. In addition to the duties imposed by the Government, the governor is an active member of the board of public health of the Territory, the Territorial banking board, the Territorial board of education, the board of trustees of the Pioneer's Home, the Territorial board of road commissioners, and as superintendent of the board for relief of destitution he has entire charge of the poor of the Territory except those receiving assistance from the indigent fund disbursed by the United States judges.

The Territorial legislature has come to the rescue by appropriating \$6,240 for the two-year period ending March 31, 1919, for clerk hire in the office of the governor in connection with Territorial laws, and \$1,200 to supplement the Federal appropriation for janitor and messenger service. With the costs of fuel, stationery, printing, and other maintenance charges increasing day by day, the Federal appropriation for contingent expenses of the governor's office has been cut from \$7,500 in 1917 to \$6,000 in 1918, this in the face of the increased expenses due to war conditions. Unless the Territorial legislature comes once more to the rescue at its next session the efficiency of the office will be seriously impaired.

# APPENDIXES.

## APPENDIX A.

### STATEMENT OF LIBRARY AND MUSEUM FUND.

*Receipts and disbursements of the Alaska Historical Library and Museum fund from July 1, 1917, to June 30, 1918.*

#### RECEIPTS.

Date.	Received from—	Title or business.	Amount.
1917.			
July 1	Balance on hand.....		\$11,505.01
2	A. E. Gurr.....	Notary public.....	10.00
3	W. H. Winston.....	Member of bar.....	10.00
5	Jas. S. Pruitt.....	do.....	10.00
5	Austin Fields.....	do.....	10.00
12	A. H. Ziegler.....	Notary public.....	10.00
16	A. E. Bain.....	do.....	10.00
16	Mrs. B. J. Esterbrook.....	do.....	10.00
16	F. R. Cowden.....	do.....	10.00
23	G. C. Winn.....	do.....	10.00
29	Joseph P. McMurtrey.....	Member of bar.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of July, 1917.....		13.00
Aug. 3	L. R. Gillette.....	Notary public.....	10.00
3	Joseph C. Dehn.....	do.....	10.00
3	C. M. Frazier.....	do.....	10.00
13	A. M. Kilgore.....	do.....	10.00
14	H. R. Calfee.....	do.....	10.00
17	R. Y. St. George.....	do.....	10.00
20	C. A. Boerner.....	do.....	10.00
23	Wm. B. Stout.....	do.....	10.00
28	Wm. G. Thomas.....	do.....	10.00
30	J. D. Wynne.....	do.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of August, 1917.....		4.00
Sept. 4	C. E. Wright-Perrin.....	Notary public.....	10.00
8	Jos. P. Follman.....	do.....	10.00
8	H. S. Chester.....	do.....	10.00
11	A. L. Van Orsdel.....	do.....	10.00
20	Justus H. Elden.....	do.....	10.00
25	Leopold David.....	do.....	10.00
27	J. J. Finnegan.....	do.....	10.00
29	W. T. Lucas.....	do.....	10.00
30	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of September, 1917.....		16.00
Oct. 1	C. Harry Woodward.....	Notary public.....	10.00
3	R. L. DeGraff.....	do.....	10.00
3	Ed. Hearn.....	do.....	10.00
11	Edward F. Medley.....	do.....	10.00
15	John B. Marshall.....	do.....	10.00
19	Fred R. Barnes.....	do.....	10.00
20	A. B. Cole.....	do.....	10.00
22	F. T. Merritt.....	Member of bar.....	10.00
22	C. P. Snyder.....	Notary public.....	10.00
31	Isaac Hamburger.....	do.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of October, 1917.....		3.00
Nov. 1	V. A. Paine.....	Notary public.....	10.00
8	Newark L. Burton.....	do.....	10.00
16	G. A. Adams.....	do.....	10.00
16	Edna Button.....	do.....	10.00
26	R. G. Datson.....	do.....	10.00
30	Wm. H. Whittlesey.....	do.....	10.00
30	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of November, 1917.....		6.00

## APPENDIX A—Continued.

*Receipts and disbursements of the Alaska Historical Library and Museum fund from July 1, 1917, to June 30, 1918—Continued.*

## RECEIPTS—Continued.

Date.	Received from—	Title or business.	Amount.
1917.			
Dec. 3	John N. Conna.....	Notary public.....	\$10.00
3	W. S. Bonfield.....	do.....	10.00
3	Lyle Elliott Noble.....	do.....	10.00
10	J. Lindley Green.....	do.....	10.00
15	Simon Hellenthal.....	do.....	10.00
17	Waldo E. Burford.....	Member of bar.....	10.00
27	Ferdinand Martin.....	Notary public.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of December, 1917.		4.00
1918.			
Jan. 2	W. D. English.....	Notary public.....	10.00
5	Phil. Abrahams.....	do.....	10.00
7	L. E. Weith.....	do.....	10.00
7	C. C. Taggart.....	do.....	10.00
7	Agnes Randle.....	do.....	10.00
9	H. E. St. George.....	do.....	10.00
9	T. S. Elsmore.....	do.....	10.00
11	H. B. Le Fevre.....	do.....	10.00
19	Archie W. Shiels.....	do.....	10.00
23	H. E. Biggs.....	do.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of January, 1918.		29.00
Feb. 1	Mrs. G. F. Paine.....	Notary public.....	10.00
5	G. E. Austin.....	do.....	10.00
5	Peter E. Nielsen.....	do.....	10.00
21	John Metzger.....	do.....	10.00
21	E. Coke Hill.....	do.....	10.00
27	H. H. Post.....	do.....	10.00
28	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of February, 1918.		88.00
Mar. 6	John T. Reed.....	Notary public.....	10.00
15	John R. Beegle.....	do.....	10.00
25	Robert E. Burns.....	do.....	10.00
25	Geo. L. Stanley.....	do.....	10.00
26	L. V. Ray.....	do.....	10.00
27	Cyril P. Wood.....	do.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of March, 1918.		116.00
Apr. 1	J. R. Fitzgerald.....	Notary public.....	10.00
1	F. H. Bailey.....	do.....	10.00
2	Accrued interest on certificate of deposit for \$9,000, one year at 4 per cent, ending Apr. 1, 1918.		300.00
10	H. A. Bauer.....	Notary public.....	10.00
11	H. A. Berry.....	do.....	10.00
15	Sumner S. Smith.....	do.....	10.00
23	Thomas G. Carter.....	do.....	10.00
24	John A. Clark.....	do.....	10.00
24	B. O. Graham.....	do.....	10.00
25	James Frawley.....	do.....	10.00
26	Edith B. Dimmick.....	do.....	10.00
27	J. L. Reed.....	do.....	10.00
30	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of April, 1918.		51.00
May 2	C. L. Cadwallader.....	Notary public.....	10.00
6	Arthur G. Thompson.....	do.....	10.00
9	Addison F. Stowe.....	do.....	10.00
18	George Roll.....	do.....	10.00
27	Lawrence S. Kerr.....	do.....	10.00
31	Receipts from foreign and domestic corporations and the issuance of certificates with seal affixed for the month of May, 1918.		12.00
June 1	Andrew Grosvold.....	Notary public.....	10.00
7	Martin Lickwald.....	do.....	10.00
7	B. O. Graham.....	Member of bar.....	10.00
10	J. C. Murphy.....	Notary public.....	10.00
11	A. W. Fox.....	do.....	10.00
30	Receipts from foreign and domestic corporations and the issuance of certificates with the seal affixed for the month of June, 1918.		20.00
	Total.....		13,167.01

## APPENDIX A—Continued.

*Receipts and disbursements of the Alaska Historical Library and Museum fund from July 1, 1917, to June 30, 1918—Continued.*

## DISBURSEMENTS.

Date.	Received from—	Title or business.	Amount.
1917.			
July 21	Daily Alaska Dispatch.....	Voucher No. 34.....	\$8.00
Aug. 1	The All-Alaska Review.....	Voucher No. 35.....	2.50
1	E. J. White, proprietor Douglas Island News.....	Voucher No. 36.....	3.00
1	The Empire Printing Co.....	Voucher No. 37.....	10.00
1	The Daily Progressive Miner.....	Voucher No. 38.....	9.00
1	Petersburg Weekly Report.....	Voucher No. 39.....	2.50
1	The Wrangell Sentinel.....	Voucher No. 40.....	1.25
1	The Daily Alaskan.....	Voucher No. 41.....	9.00
1	C. C. Nichols.....	Voucher No. 42.....	25.00
2	The Seward Gateway Publishing Co.....	Voucher No. 43.....	13.00
2	The Valdez Daily Prospector.....	Voucher No. 44.....	12.00
2	Sheldon Jackson School Print Shop.....	Voucher No. 45.....	.50
7	The Beaver Club of Oregon.....	Voucher No. 46.....	3.00
25	The Chitina Leader.....	Voucher No. 47.....	3.00
25	The Citizens' Publishing Co.....	Voucher No. 48.....	12.00
25	Fairbanks Daily News Miner.....	Voucher No. 49.....	10.00
31	C. C. Nichols.....	Voucher No. 50.....	25.00
sept. 12	Nome Publishing Co.....	Voucher No. 51.....	24.00
12	Record-Citizen.....	Voucher No. 52.....	12.00
27	Nome Industrial Worker.....	Voucher No. 53.....	20.00
27	R. L. Polk & Co. (Inc.).....	Voucher No. 54.....	10.00
29	C. C. Nichols.....	Voucher No. 55.....	25.00
Oct. 11	Pacific Fisherman.....	Voucher No. 1.....	3.00
31	C. C. Nichols.....	Voucher No. 2.....	25.00
Nov. 9	Alaska Bindery.....	Voucher No. 3.....	55.00
19	Ed. Baudin.....	Voucher No. 4.....	1.50
19	Wells Fargo & Co. Express.....	Voucher No. 5.....	1.70
Dec. 1	C. C. Nichols.....	Voucher No. 6.....	25.00
10	J. K. Gill Co.....	Voucher No. 7.....	6.00
10	A. F. McKnight.....	Voucher No. 8.....	76.00
31	C. C. Nichols.....	Voucher No. 9.....	25.00
1918.			
Jan. 24	Juneau Transfer Co.....	Voucher No. 10.....	12.50
31	C. C. Nichols.....	Voucher No. 11.....	25.00
Feb. 14	Washington University State Historical Society.....	Voucher No. 12.....	2.00
28	C. C. Nichols.....	Voucher No. 13.....	25.00
Mar. 15	do.....	Voucher No. 14.....	12.50
Apr. 1	Jas. L. McCloskey.....	Voucher No. 15.....	12.50
4	Juneau Transfer Co.....	Voucher No. 16.....	5.50
10	D. Appleton & Co.....	Voucher No. 17.....	3.00
24	Alaska Bindery.....	Voucher No. 18.....	121.25
30	Jas. L. McCloskey.....	Voucher No. 19.....	25.00
June 1	do.....	Voucher No. 20.....	25.00
10	do.....	Voucher No. 21.....	8.33
21	Gunnison & Robertson, account United States Fidelity & Guaranty Co.....	Voucher No. 22.....	33.16
26	Ruebe & Romeike.....	Voucher No. 23.....	30.00
29	J. V. Enette.....	Voucher No. 24.....	16.67
			815.36
	Less error Apr. 17, 1917 (redeposited).....		1.50
			813.86
	Balance.....		12,353.15
	Total.....		13,167.01

## APPENDIX B.

*Official Directory.*

## TERRITORIAL GOVERNMENT.

*Governor.*—Thomas Riggs, jr., Juneau.

*Secretary to the governor.*—G. Fenton Cramer, Juneau.

*Ex-officio secretary of Alaska.*—Charles E. Davidson, Juneau.

*Delegate to Congress.*—Charles A. Sulzer.

## UNITED STATES SURVEYOR GENERAL'S OFFICE.

*Juneau.*—Charles E. Davidson, surveyor general; Martin George, chief clerk; Edward P. Kendall, chief draftsman; Charles E. Naghel, financial and general clerk; Frank A. Brittain, stenographer and typewriter; Robert G. Green, mineral draftsman; Byron L. Fitch and Ernest Taschek, draftsmen.

*United States deputy surveyors.*—Asa C. Baldwin, United States Army; H. P. M. Birkinbine, Haines; H. P. Crowther, Juneau; William A. Hesse, Cordova; Charles S. Hubbell, Seattle, Wash.; H. C. Ingram, Fairbanks; Frank A. Metcalf, Juneau; William Muncaster, Seattle, Wash.; R. D. Pickett, Mammoth, Cal.; Duke E. Stubbs, Aniak; F. J. Wettrick, V. H. Wilhelm, F. W. Williamson, Juneau; H. H. Waller, United States Army.

*United States mineral surveyors.*—Asa C. Baldwin, United States Army; H. P. M. Birkinbine, Haines; Arthur G. Blake, Hayward, Cal.; H. P. Crowther, Juneau; William W. Elmer, Portland, Oreg.; George O. Hallock, Kent, Wash.; William A. Hesse, Cordova; Charles S. Hubbell, Seattle, Wash.; Henry C. Ingram, Fairbanks; Frank A. Metcalf, Juneau; O. Adrian Nelson, Chitina; R. D. Pickett, Mammoth, Cal.; I. McK. Reed, Nome; L. D. Ryus, Ketchikan; D. B. Skinner, Bellevue, Wash.; B. D. Stewart, Sulzer; Duke E. Stubbs, Aniak; H. H. Waller, United States Army; R. F. Whitham, Olympia, Wash.; F. J. Wettrick, V. H. Wilhelm, F. W. Williamson, Juneau.

## OFFICE OF THE SECRETARY OF ALASKA.

*Juneau.*—Charles E. Davidson, ex-officio secretary; A. W. Fox, chief clerk.

## UNITED STATES CUSTOMS OFFICIALS.

*Juneau.*—J. F. Pugh, collector; C. D. Garfield, special deputy collector; M. S. Whittier, deputy collector and inspector; George M. Simpkins, deputy collector and inspector.

*Ketchikan.*—Milton S. Dobbs, deputy collector in charge; George W. Woodruff, deputy collector and inspector; John L. Abrams, deputy collector and inspector.

*Wrangell.*—F. E. Bronson, deputy collector in charge.

*Skagway.*—Fred J. Vandewall, deputy collector in charge; G. G. Miller, deputy collector and inspector.

*Sulzer.*—J. D. Wynne, deputy collector in charge.

*Nome.*—R. W. J. Reed, deputy collector in charge.

*St. Michael.*—Edwin R. Stivers, deputy collector in charge.

*Cordova.*—Elmer O. Norgren, deputy collector in charge.

*Unalaska.*—N. E. Bolshanin, deputy collector in charge.

*Eagle.*—J. J. Hillard, deputy collector in charge.

*Fortymile.*—John Elden, deputy collector in charge.

*Petersburg.*—John C. Allen, deputy collector in charge.

*Naket.*—Andrew P. Kashevaroff, deputy collector and inspector.

## UNITED STATES COURTS.

*Division No. 1.*—Judge, Robert W. Jennings, Juneau; court stenographer, L. A. Green, Juneau; clerk of court, J. W. Bell, Juneau; court librarian, J. F. Hurley, Juneau; deputy clerks, John T. Reed, Lafe E. Spray, C. Z. Denny, Juneau; William T. Mahoney, Ketchikan; Edward A. Rasmuson, Skagway. United States Marshal, J. M. Tanner, Juneau; chief deputy, W. W. Casey, jr., Juneau; deputy United States Marshals, Harry F. Morton, Juneau; C. H. Passells, Juneau; George L. Johnson, Douglas; N. O. Hardy, Skagway; J. W. Combs, Haines; J. J. Egan, Tenakee; Henry L. Bahrt, Sitka; Noah Howell, Petersburg; H. J. Wallace, Wrangell; C. D. Calhoun, Craig; W. B. Sharpe, Ketchikan. United States attorney, James A. Smiser, Juneau; assistant United States attorneys, J. J. Reagan, Juneau; Steve Ragan, Ketchikan; clerk to United States attorney, Ina S. Liebhardt, Juneau. United States commissioners, Newark L. Burton, Juneau; Jack Henson, Douglas; William T. Mahoney, Ketchikan; Edward A. Rasmuson, Skagway; J. J. Kennedy, Haines; John C. Allen, Petersburg; C. E. Weber, Wrangell; Charles A. Fox, Craig; U. S. Rush, Kasaan; R. W. De Armond, Sitka; Walter Ramsayer, Chatham; A. H. Keuttner, Killisnoo; I. J. Macomber, Chichagof; E. M. Axelson, Yakutat.

*Division No. 2.*—Judge, William A. Holzheimer, Nome; clerk of court, Thomas McGann, Nome; deputy clerks, W. C. McGuire, A. C. Dill, Earl C. Modini, Nome. United States marshal, Emmet R. Jordan, Nome; chief deputy, Adrian B. Miller, Nome; deputy United States marshals, L. D. Lewis, Elmer Reed, Harry Pigeon, Catherine A. Anpher, Nome; T. W. Coady, Fortuna Ledge; John Little, St. Michael; M. R. Luther, Teller; Eric Johnson, Council; Robert H. Humber, Candle; Bernard J. O'Reilly, Kiana. United States Attorney, Gubrand J. Lomen, Nome. United States commissioners, Hugh O'Neill, Nome; D. W. Cram, Barrow; Rodney S. Dimmick, Candle; John D. Flanigan, Council; George L. Stanley, Kiana; John W. Fuller, Fortuna Ledge; Charles J. Koen, St. Michael; W. J. Worcester, Taylor; William N. Marx, Teller; Henry Sethmann, Haycock.

*Division No. 3.*—Judge, Fred M. Brown, Valdez; court stenographer, Isaac Hamburger, Valdez; clerk of court, Arthur Lang, Valdez; deputy clerks, Charles H. Wilcox, William M. Meals, John A. Roseen, Valdez; Leopold David, Anchorage; W. H. Whittlesey, Seward; Thomas S. Scott, Cordova. United States marshal, F. R. Brennenman, Valdez; chief deputy, J. H. D. Bouse, Valdez; deputy United States marshals, A. C. Dowling, H. C. De Line, S. O. Casler, Valdez; C. W. Mossman, Anchorage; William L. Fursman, Cordova; W. J. Feaster, Chitina; Isaac Evans, Seward; Karl Armstrong, Kodiak; Charles McCallum, Unga; Paul Buckley, Unalaska; M. H. Healey, Dillingham; James M. Millsap, McCarthy; A. F. Hoffman, Matanuska; V. L. Sedgwick, Naknek; C. W. Harrington, Seldovia; N. E. Ohlsson, Girdwood; H. R. Brown, Talkeetna; H. M. Conrad, Latouche. United States attorney, William A. Munley, Valdez; assistant United States attorneys, Hilliard G. Bennett, Valdez; J. O. Murphey, Anchorage. United States commissioners, N. E. Bolshanin, Unalaska; L. H. French, Dillingham; William O'Connor, Chitina; C. P. Smith, McCarthy; Edward F. Medley, Cordova; Fred Phillips, Illiama; Charles C. Naughton, Katalla; Leopold David, Anchorage; H. H. Beck, Kodiak; William Nellsen, Naknek; William H. Whittlesey, Seward; William D. Coppernoll, Talkeetna; F. C. Driffeld, Unga; George J. Love, Valdez; Anthony McGettigan, Chisana. Commissioners with powers of justice of peace only, Royden D. Chase, Anchorage; Sid. S. Bettman, Knik; Herbert M. Pratt, Kenai; William A. Dickey, Latouche; Ralph A. Anderson, Seldovia; Alexander H. Proctor, St. George Island; F. G. Dodge, U. S. Coast Guard cutter *Unalga*.

*Division No. 4.*—Judge, Charles E. Bunnell, Fairbanks; court stenographer, E. T. Wolcott, Fairbanks; clerk of court, J. E. Clark, Fairbanks; deputy clerks, Frank B. Hall, L. F. Protzman, Grace Fisher, Fairbanks; Asa M. Kilgore, Iditarod; Thomas J. De Vane, Ruby; assistant clerk, Ella Knudsen, Fairbanks. United States marshal, Lewis T. Erwin, Fairbanks; chief deputy, J. H. Miller, Fairbanks; deputy United States marshals, M. O. Carlson, H. R. Tull, Helen Criswell, John C. Wood, Peter McMullen, Fairbanks; G. G. Geraghty, Flat; C. L. Vawter, Tanana; John B. Powers, Eagle; Thomas H. Long, Ruby; E. D. Heppenstall, Wiseman; J. L. Anders, Hot Springs; C. T. Spencer, Circle; P. R. McGuire, Fort Yukon; M. F. Miller, Brooks; James Hagan, Nenana. United States attorney, R. F. Roth, Fairbanks; assistant United States attorneys, Harry E. Pratt, Fairbanks; E. Coke Hill, Ruby. Clerk to United States attorney, Emma Haggren, Fairbanks. United States commissioners, Howard J. Atwell, Livengood; John Barker, Beaver City; John J. Donovan, Franklin; Joseph C. Dehn, Tanana; Thomas J. De Vane, Ruby; Wilbur F. Green, Tacotna; A. J. Griffin, Richardson; Reed W. Heilig, Fairbanks; Preston J. Hilliard, Eagle; A. M. Kilgore, Flat; George W. Ledger, Rampart; Vance R. McDonald, Long City; Robert S. McDonald, Nenana; J. C. Moody, Ophir; Frank A. Reynolds, Circle; Duke E. Stubbs, Aniak; Joseph C. Van Orsdel, Glacier; Samuel R. Weiss, Chatanika; Frank C. White, Fort Yukon; Thomas B. Wright, Wiseman; William O. Young, Hot Springs.

#### UNITED STATES LAND OFFICE.

*Division No. 1.*—C. B. Walker, register, Juneau; Frank A. Boyle, receiver, Juneau.

*Division No. 2.*—G. A. Adams, ex officio register, Nome; E. R. Jordan, ex officio receiver, Nome.

*Division No. 3.*—Included in division No. 1.

*Division No. 4.*—J. E. Clark, ex officio register, Fairbanks; Lewis T. Erwin, ex officio receiver, Fairbanks.



*Field division (headquarters, Juneau).*—Chief, C. R. Arundell; special agents, Mason B. Leming, J. L. Backstrom, H. K. Carlisle, F. K. Andrews; Mineral inspector, Frank Farmer; clerk and stenographer, Walter B. Heisel.

#### DEPARTMENT OF AGRICULTURE.

C. C. Georgeson, D. Sc., agronomist in charge, Sitka; H. E. Pratt, B. Sc., assistant in charge, Kodiak; S. H. Loyd, B. Sc., animal husbandman, Kodiak; M. D. Snodgrass, B. Sc., in charge, Fairbanks; W. T. White, B. Sc., assistant, Fairbanks; G. W. Gasser, B. Sc., assistant in charge, Rampart; Frederick E. Rader, B. Sc., assistant in charge, Matanuska.

#### EDUCATION.

*White schools.* (See Territorial boards, etc.)

*Native schools.*—P. P. Claxton, Commissioner of Education, Washington, D. C.; W. T. Lopp, superintendent of education of natives of Alaska, Seattle, Wash.; H. C. Sinclair, supply agent, Seattle, Wash.; C. C. Bestor, special disbursing agent, Seattle, Wash.; C. W. Hawkesworth, superintendent southeastern district, Juneau; A. H. Miller, superintendent southwestern district, Anchorage; F. L. Forbes, superintendent, upper Yukon district, Tanana; W. H. Johnson, superintendent western district, St. Michael; W. C. Shields, superintendent northwestern district, Nome. Physicians, L. G. French, Nushagak; H. C. Randle, Nulato; F. W. Lamb, Aklak; D. S. Newman, Nome; James P. Mooney, Juneau; W. H. Chase, Cordova; G. E. Howe, Ellamar (contract); C. Welch, Canile (contract); W. Ramsey, Council (contract).

#### INTERNAL REVENUE.

Charles C. John, field deputy, Juneau; George Hutchinson, stamp deputy, Fairbanks.

#### IMMIGRATION SERVICE.

William G. Strench, inspector in charge, Ketchikan; Charles W. Durkee, jr., immigrant inspector, Skagway.

#### BUREAU OF FISHERIES.

Ward T. Bower, agent at large; E. M. Ball, H. J. Christoffers, Arnold C. Reynolds, assistant agents at large; E. P. Walker, inspector, Wrangell, Pribilof Islands, H. C. Fassett, A. H. Proctor, agents and caretakers; Henry D. Aller, G. Dallas Hanna, storekeepers; W. Byrd Hunter, Charles E. Johnson, physicians; Mr. and Mrs. George Haley, Charles E. Crompton, schoolteachers. Wardens at large, C. F. Townsent, Christian L. Larson, Fred H. Gray, Shirley A. Baker, Lemuel G. Wingard. Fred A. Martin, special fur warden, Anchorage. Edwin Wentworth, superintendent fisheries station, Afognak; Charles B. Grater, superintendent fisheries station, Yes Bay; Hans Blord, master fisheries steamer *Roosevelt*; Edwin Hofstad, master fisheries steamer *Ospray*.

#### STEAMBOAT INSPECTION SERVICE.

George H. Whitney, local inspector of hulls, Juneau; Peter G. Peltret, local inspector of boilers, Juneau; George E. Mann, clerk to local inspectors, Juneau; Harry W. Ravens, local inspector of hulls, St. Michael; Jerome A. Deslo, clerk to local inspectors, St. Michael.

#### LIGHTHOUSE SERVICE, SIXTEENTH DISTRICT.

Walter C. Dibrell, inspector, Ketchikan; Ralph R. Tinkham, superintendent; Walter G. Will, assistant superintendent; Albert B. Edmonds, chief clerk; William K. Spaulding, Ethel H. Rudge, clerks; Rolf Foosness, depot keeper; William J. Wright, mechanic; Michael Harris, foreman, Ketchikan.

## BOARD OF ALASKA ROAD COMMISSIONERS.

W. H. Waugh, major, Engineers, National Army, president and engineer officer; John Zug, captain, Engineer Reserve Corps, assistant engineer officer; Sidney L. Carter, first lieutenant, Engineer Reserve Corps, disbursing officer, Juneau.

## ALASKAN ENGINEERING COMMISSION.

*Anchorage.*—Burton H. Barndollar, examiner of accounts; Dr. J. B. Beeson, chief surgeon; Andrew Christensen, manager, land and industrial department; John T. Cunningham, trainmaster; William C. Edes, chairman; I. H. Fleischman, chief clerk; Walter J. H. Fogelstrom, bridge engineer; William Gerig, engineer in charge, Anchorage division and consulting engineer; Grover C. Hammond, special disbursing agent; F. A. Hansen, engineer maintenance of way; Edward T. Lindner, land office assistant; W. R. Manning, acting general storekeeper; Fred T. Mumma, superintendent, T. and T. department; DeWitt B. Van Derlip, chief accountant; James G. Watts, town-site manager.

*Nenana.*—Frederick D. Browne, engineer in charge Fairbanks division; W. H. Grigg, town-site manager; Charles H. Hall, special disbursing agent; A. J. Hewitt, chief accountant; George E. Markus, storekeeper; Dr. David H. More, acting chief surgeon; W. L. Packer, superintendent of construction; Walter B. Reaburn, superintendent of transportation.

*Seward.*—Robert J. Welr, engineer in charge, Seward division; Edgar R. Tarwater, special disbursing agent; Thomas M. Harr, chief accountant.

## FOREST SERVICE.

*Tongass National Forest.*—W. G. Weigle, forest supervisor; B. F. Heintzleman, deputy forest supervisor; R. R. Kan Smith, forest examiner; J. M. Wyckoff, clerk and special fiscal agent; Marguerite B. Todd, clerk; C. T. Gardner, forest ranger, Ketchikan. James Allen, ranger, Petersburg; George H. Peterson, ranger, Sitka; J. L. MacKechnie, ranger, Craig; George H. Canfield, assistant engineer, United States Geological Survey, in charge of stream gauging work in cooperation with the Forest Service, Juneau.

*Chugach National Forest.*—W. G. Weigle, forest supervisor, Ketchikan; T. M. Hunt, forest supervisor; R. J. Settles, clerk, Seward; W. J. McDonald, ranger, Cordova; Grover C. Haneman, ranger, Anchorage.

## GAME WARDENS.

*Division No. 1.*—J. C. Lund, Juneau; Patrick Hamilton, Ketchikan; Charlie Klontech, Sitka.

*Division No. 2.*—Martin O. Solberg, Nome.

*Division No. 3.*—J. A. Baughman, Seward; Peter S. Ericksen, McCarthy; F. A. Martin, Anchorage.

*Division No. 4.*—L. F. Protzman, Fairbanks; S. R. L. Foster, Nenana; Robert E. Steel, Eagle.

## SPECIAL EMPLOYEES FOR SUPPRESSING LIQUOR TRAFFIC AMONG NATIVES OF ALASKA.

J. F. McDonald, Juneau; Thomas P. Killeen, Nome; Joseph A. Bourke, Valdez; John A. Moe, Ruby.

## OFFICIALS AND BOARDS AUTHORIZED BY TERRITORIAL LEGISLATURE.

## TERRITORIAL TREASURY.

Walstein G. Smith, treasurer; Juneau; Charles E. Harland, clerk, Juneau.

## PUBLIC HEALTH.

Gov. Thomas Riggs, jr., ex officio commissioner of health, Juneau; assistant health commissioners, L. P. Dawes, division No. 1, Juneau; W. D'Arcy Chace,

division No. 2, Nome; W. W. Council, division No. 3, Cordova; J. A. Sutherland, division No. 3, Fairbanks.

#### VITAL STATISTICS.

Charles E. Davidson, ex officio register, Juneau; Plooma Crowther, clerk, Juneau.

#### TERRITORIAL BANKING BOARD.

Gov. Thomas Riggs, jr., president, Juneau; Walstein G. Smith, secretary, Juneau; Charles E. Davidson, Juneau.

#### BOARD OF MEDICAL EXAMINERS.

B. L. Myers, president, Ketchikan; L. O. Sloan, Juneau; J. H. Mustard, Nome; Curtis Welch, Council; J. M. Sloane, Seward; J. H. Romig, Seward; Aline B. Bradley, Fairbanks; H. M. McCallum, Fairbanks.

#### BOARD OF DENTAL EXAMINERS.

W. E. Zuber, president, Ketchikan; E. H. Kaser, Juneau; L. W. Fromm, Nome; O. J. Keating, Seward; Robert R. Myers, Fairbanks.

#### BOARD OF PHARMACY.

W. B. Kirk, president, Juneau; William H. Caswell, Valdez; D. H. Cristoe, Douglas; Jos. G. McDougall, Nome; William Ramsey, Council; Edward V. Boyle, Cordova; Frank M. Dunham, Ralph T. Kubon, Fairbanks.

#### TERRITORIAL BOARD OF EDUCATION.

Gov. Thomas Riggs, jr., president, Juneau; J. R. Heckman, Ketchikan; John Sundback, Nome; O. P. Hubbard, Valdez; O. P. Gaustad, Fairbanks.

#### TERRITORIAL COMMISSIONER OF EDUCATION.

L. D. Henderson, Juneau; clerk to Commissioner, Leonore Chapin, Juneau.

#### TERRITORIAL ATTORNEY GENERAL.

George B. Grigsby, Juneau; clerk to attorney general, Ruth Griffin, Juneau.

#### BOARDS OF CHILDREN'S GUARDIANS.

*Division No. 1, Juneau.*—Robert W. Jennings, United States district judge; J. M. Tanner, United States marshal; Mrs. Joseph W. Thatcher.

*Division No. 2, Nome.*—Wm. A. Holzheimer, United States district judge; E. R. Jordan, United States marshal; Mrs. Thomas Mulligan.

*Division No. 3, Valdez.*—Fred M. Brown, United States district judge; F. R. Brenneman, United States marshal (position of woman member vacant at present).

*Division No. 4, Fairbanks.*—Charles E. Bunnell, United States district judge; L. T. Erwin, United States marshal; Mrs. Luther C. Hess.

#### BOARD OF TRUSTEES, ALASKA PIONEERS' HOME.

Gov. Thomas Riggs, jr., chairman, Juneau; Allen Shattuck, secretary, Juneau; W. W. Casey, treasurer, Juneau; Arthur G. Shoup, superintendent of home, Sitka.

#### BOARD FOR RELIEF OF DESTITUTION.

Gov. Thomas Riggs, jr., superintendent, Juneau. Advisory members: J. W. Bell, clerk of United States district court, Juneau; Emmet R. Jordan, United States marshal, Nome; F. R. Brenneman, United States marshal, Valdez; L. T. Erwin, United States marshal, Fairbanks.

## TERRITORIAL BOARD OF ROAD COMMISSIONERS.

Gov. Thomas Riggs, jr., chairman; Charles E. Davidson, secretary; Walstein G. Smith, member, Juneau.

## DIVISIONAL BOARDS OF ROAD COMMISSIONERS.

*Division No. 1.*—Ed. C. Hurlbutt, commissioner, Juneau; assistants, H. T. Tripp, T. E. P. Keegan, Juneau.

*Division No. 2.*—John A. Willson, commissioner, Nome; assistants, Daniel A. Jones, Nome, E. H. Pfaffle, Council.

*Division No. 3.*—James E. Wilson, commissioner, Valdez; assistants, George H. Merrifield, Valdez; A. A. Shonbeck, Anchorage.

*Division No. 4.*—H. H. Ross, commissioner, Fairbanks; assistants, George A. Chapin, Iditarod; James E. Barrack, Fairbanks.

## TERRITORIAL BOARD OF FISH COMMISSIONERS.

B. M. Behrends, Juneau; John R. Beegle, Ketchikan; W. H. Spaulding, Hawk Inlet.

## BOARD OF REGENTS, AGRICULTURAL COLLEGE AND SCHOOL OF MINES.

*Division No. 1.*—L. S. Keller, Skagway.

*Division No. 3.*—L. F. Shaw, Anchorage.

*Division No. 4.*—Mrs. L. C. Hess, A. R. Heilig, H. Claude Kelly, H. B. Parkin, A. C. Nordale, Paul J. Rickert, Fairbanks.

## TERRITORIAL BUREAU OF PUBLICITY.

E. J. White, chief of bureau; Joseph A. Baxter, assistant chief.

## TERRITORIAL MINE INSPECTOR.

(Vacant.)

## APPENDIX C.

## IMPORTS AND EXPORTS.

## Annual Report of the Collector of Customs for the Calendar Year, 1917.

## UNITED STATES CUSTOMS SERVICE.

## OFFICE OF THE COLLECTOR.

*Port of Juneau, Alaska, January 31, 1918.*

The progress and development of Alaska as indicated herein, though substantial, is not so great as anticipated at the beginning of the year. Under normal conditions, this report has been considered a fair basis for determining such results. The unusual situation due to the world conflict, and more particularly since the active entry of our country therein, has so affected affairs generally as to unbalance production and commerce.

Separating the products of the Territory into two general classes, land and sea, it will be noted that last year the value of land products exceeded those of the sea by nearly \$13,000,000, while in the present year the sea products were nearly \$3,000,000 more than those of the land. Abnormally increased price of copper brought this about in the previous and the same cause applied to fish products in the present year, reversed the position of the classes.

The retarded exploitation of the natural resources, the depleted placer deposits, and the large withdrawal of labor from our industries to more lucrative employment in the States have been the means of decreasing the volume of production.

The price of merchandise shipped to the Territory has been greatly enhanced compared with the volume. Thus the \$21,000,000 gain in commerce value of this year over last has been due to price rather than volume.

In the following table, the items: Imports and exports of foreign gold and silver, and a considerable portion of the exports foreign, are in transit commerce and do not enter into the actual trade.

*Commerce of Alaska.*

	Calendar years.						
	1911	1912	1913	1914	1915	1916	1917
<b>IMPORTS.</b>							
Merchandise from the United States.....	\$15,180,149	\$21,992,761	\$21,680,000	\$21,610,880	\$23,203,168	\$30,834,798	\$30,838,168
Merchandise from foreign ports.....	519,221	928,084	761,173	682,904	500,519	1,544,182	1,196,196
Gold and silver from foreign ports.....	3,520,170	3,840,546	4,230,985	3,576,090	4,223,620	2,936,018	2,397,237
<b>Total imports.....</b>	<b>19,208,540</b>	<b>26,758,341</b>	<b>26,761,848</b>	<b>25,849,944</b>	<b>28,017,307</b>	<b>35,314,993</b>	<b>44,431,600</b>
<b>EXPORTS.</b>							
Merchandise to the United States.....	19,313,859	24,798,886	22,252,942	25,427,873	34,245,272	62,507,811	76,651,988
Merchandise and gold and silver to foreign ports.....	1,174,393	1,636,780	1,248,878	1,047,746	1,226,120	1,873,013	3,093,500
Domestic gold and silver to the United States.....	14,699,694	16,081,705	12,959,266	14,729,905	16,090,411	16,332,117	14,939,449
Foreign gold and silver to the United States.....	3,353,361	3,704,173	4,306,591	3,450,400	3,296,012	3,909,509	2,008,884
<b>Total exports.....</b>	<b>38,546,307</b>	<b>46,166,544</b>	<b>40,767,677</b>	<b>44,655,924</b>	<b>54,856,815</b>	<b>84,622,450</b>	<b>96,693,821</b>
<b>Grand total.....</b>	<b>57,754,847</b>	<b>72,924,885</b>	<b>67,529,525</b>	<b>70,506,868</b>	<b>82,874,122</b>	<b>119,937,443</b>	<b>141,125,421</b>

The value of shipments received by the Government railroad this year is \$2,797,819 and its outward merchandise is \$33,004. Include these items in the foregoing table, and the total commerce will be \$143,956,285.

Owing to the near conformity of the judicial with the geographical divisions of the Territory and considering that the former are more definitely described and fixed in the public mind, it has been deemed advisable to subdivide the shipments from the United States accordingly. This has been done in the tables for the present as well as the previous years.

New features in the following table are tonnage quantities of several items (the pound units of antimony, copper, lead, and tin indicate the metal contents), dried and pickled fish, canned herring and clams, shrimp, turnips, and reindeer meat.

Important gains will be noted in many products, largely due to conditions heretofore stated. Losses in copper production were occasioned by labor troubles in the principal district, and in gold by the greatly curtailed output due to insufficient labor and other causes. Returns of furs from the Pribiloff Islands and mail shipments of the same not having been received, account for the discrepancy in that item.

In order to arrive at the full value of fish products the following exports, foreign, should be added to the amounts shown in the table:

	Quantity.	Value.
	Pounds.	
Salmon, fresh.....	338,000	\$21,380
Halibut, fresh.....	3,301,181	304,734
Cod, fresh.....	224,665	7,653
Herring, salt.....	713,888	43,781
Salmon, canned.....	5,596,344	783,777
<b>Total.....</b>		<b>1,111,284</b>

This sum taken with the total of domestic exports makes the grand total value of shipments from Alaska \$92,702,692, an increase over last year of nearly \$18,000,000.

*Value of merchandise and gold and silver shipped from Alaska to United States.*

Articles.	1914		1915	
	Quantity.	Value.	Quantity.	Value.
Antimony ore.....	tons.....	.....	1,021	.....
.....	pounds.....	.....	2,283,304	\$189,345
Copper ore.....	tons.....	102,942	108,576	.....
.....	pounds.....	25,261,888	\$3,365,342	69,366,106
Fish:				
Fresh.....	pounds.....	10,913,355	569,314	9,384,382
Dried or cured.....	do.....	7,064,359	170,411	5,609,574
Pickled.....	barrels.....	15,784	145,778	10,179
Salmon, canned.....	pounds.....	198,691,795	17,906,215	210,110,632
Salmon, all other.....	do.....	.....	750,512	17,892,377
Herring, canned.....	do.....	.....	.....	604,271
Clams, canned.....	do.....	.....	.....	.....
Shrimp.....	do.....	.....	.....	.....
All other fish.....	.....	23,418	.....	89,362
Total fish.....	.....	19,565,648	.....	19,334,012
Fish fertilizers.....	tons.....	1,444	51,463	699
Fish and whale oil.....	gallons.....	1,015,195	310,344	359,897
Fur and fur skins.....	.....	610,401	.....	411,401
Gypsum.....	tons.....	23,015	107,347	16,450
Lead ore.....	tons.....	.....	1,063	.....
Lead bullion.....	pounds.....	.....	558,991	31,032
Marble.....	pounds.....	119,796	13,648	642
Tin ore.....	tons.....	124	184	105,180
Turnips.....	pounds.....	270,800	413,710	79,471
Tungsten ore.....	do.....	.....	.....	.....
Reindeer meat.....	do.....	.....	13,485	2,040
All other Alaska merchandise.....	.....	53,448	.....	87,373
Gold and silver.....	.....	14,728,905	.....	16,090,411
United States goods returned.....	.....	1,172,684	.....	1,261,970
Foreign goods.....	.....	387,959	.....	220,448
Total.....	.....	40,545,737	.....	50,554,518

Articles.	1916		1917	
	Quantity.	Value.	Quantity.	Value.
Antimony ore.....	tons.....	1,408	78	.....
.....	pounds.....	1,729,177	70,862	\$8,973
Copper ore.....	tons.....	182,638	199,014	.....
.....	pounds.....	135,280,219	35,534,089	100,740,856
Fish:				
Fresh.....	pounds.....	10,355,820	612,707	12,747,266
Dried or cured.....	do.....	5,206,562	185,649	6,624,525
Pickled.....	barrels.....	18,849	229,562	27,964
Salmon, canned.....	pounds.....	237,764,309	21,567,123	265,452,307
Salmon, all other.....	do.....	12,972,281	987,695	16,641,213
Herring, canned.....	do.....	890,549	123,098	1,663,580
Clams, canned.....	do.....	281,232	33,808	1,997,019
Shrimp.....	do.....	68,340	3,376	83,930
All other fish.....	.....	61,635	.....	80,264
Total fish.....	.....	23,804,621	.....	45,049,066
Fish fertilizers.....	tons.....	855	29,161	1,196
Fish and whale oil.....	gallons.....	897,064	349,470	1,015,167
Fur and fur skins.....	.....	919,998	.....	705,674
Gypsum.....	tons.....	13,275	55,100	379,580
Lead ore.....	tons.....	1,768	2,866	43,800
Lead bullion.....	pounds.....	1,278,216	78,277	1,595,683
Marble.....	pounds.....	18,932	1,485	122,339
Tin ore.....	tons.....	146	85,623	72,406
Turnips.....	pounds.....	229,129	54,147	219,994
Tungsten ore.....	do.....	101,580	1,958	114,462
Reindeer meat.....	do.....	68,620	54,870	249,767
All other Alaska merchandise.....	do.....	4,247	627	4,929
Gold and silver.....	.....	44,350	20,160	19,550
United States goods returned.....	.....	16,332,117	38,295	6,581
Foreign goods.....	.....	1,527,700	.....	64,072
.....	.....	756,674	.....	14,939,440
Total.....	.....	79,808,432	.....	2,233,125
.....	.....	.....	.....	536,446

The following table of passenger movement for six years indicates the travel, by regularly established routes, to and from the district and the Yukon territory. Tourists, and cannery employees bound for remote places, are not included.

The Eagle and Dawson movement shows the local frontier travel, which must not be considered with the general account, as the greater number of these passengers arrived at or departed from Ketchikan or St. Michael and have been accounted for in their returns.

	1912	1913	1914	1915	1916	1917
Arrivals from the United States and British Columbia:						
Southeastern, southern, and western Alaska	20,645	21,963	23,822	25,548	27,528	25,749
Nome, St. Michael, and Bering Sea.....	2,067	1,795	1,491	1,455	1,078	1,261
Total.....	22,712	23,758	25,313	27,003	28,606	27,010
Departures to the United States and British Columbia:						
Southeastern, southern, and western Alaska	18,502	21,376	22,645	19,793	25,426	30,089
Nome, St. Michael, and Bering Sea.....	3,375	2,974	1,893	1,614	1,433	1,170
Total.....	21,877	24,350	24,538	21,407	26,859	31,259
Arrivals at Eagle from Dawson, Yukon territory	594	914	785	1,086	1,182	759
Departures from Eagle to Dawson, Yukon territory.....	935	1,448	1,102	873	727	674
Total.....	1,529	2,362	1,887	1,959	1,909	1,433

*Comparative statement of imports and exports for 15 years.*

1903-----	\$44,878,222	1911-----	\$57,754,847
1904-----	53,417,799	1912-----	72,924,885
1905-----	54,116,582	1913-----	67,529,525
1906-----	63,488,294	1914-----	70,505,868
1907-----	48,280,512	1915-----	82,874,122
1908-----	53,776,804	1916-----	119,937,443
1909-----	58,923,143	1917-----	141,125,462
1910-----	55,000,337		

*Comparative statement of Alaskan products shipped from Alaska to the United States for 15 years.*

1903-----	\$15,928,217	1911-----	\$33,856,264
1904-----	19,655,911	1912-----	40,354,178
1905-----	22,065,733	1913-----	34,693,590
1906-----	30,759,159	1914-----	40,157,778
1907-----	27,682,263	1915-----	50,335,683
1908-----	30,299,788	1916-----	79,051,758
1909-----	31,686,112	1917-----	90,354,962
1910-----	28,000,279		

The tables following give the value of merchandise shipped to Alaska from the United States for the year 1917, segregated as to place of consignment, with comparative statements for 5 years and customs transactions for 12 years:

*Value of merchandise shipped from United States to first division.*

Auk Bay-----	\$23,041	Douglas-----	\$350,975
Burnett Inlet-----	50,988	Doyhof-----	111,473
Cape Edwards-----	146,217	Dundas-----	123,376
Chatham-----	137,989	Excursion Inlet-----	386,542
Chichagoff-----	21,356	Funter Bay-----	164,677
Chilkoot-----	89,531	Gambler Bay-----	89,755
Chomley-----	196,875	George Inlet-----	104,013
Craig-----	145,536	Glacier Bay-----	4,154

Gypsum	\$9,503	Port Walter	\$369,823
Hadley	18,141	Quadra	83,942
Haines	230,029	Red Bluff Bay	42,872
Hawk Inlet	137,383	Roe Point	85,136
Heceta	116,596	Rose Inlet	79,624
Hidden Inlet	42,318	Saginaw Bay	13,757
Hoonah	180,983	Santa Ana	42,258
Hunters Bay	53,820	Shakan	46,184
Hydaberg	22,032	Sitka	224,083
Jualin	21,528	Skagway	356,950
Juneau	2,862,661	Skowl Arm	42,877
Kake	152,741	Sulzer	44,520
Karheen	61,709	Taku Harbor	236,637
Kasaan	201,757	Tee Harbor	119,473
Ketchikan	2,446,764	Tenakee	75,921
Killisnoo	55,630	Thane	466,080
Klawock	86,917	Tokeen	26,321
Lake Bay	36,040	Treadwell	517,783
Loring	89,493	Tyee	14,889
Letnikof Cove	60,031	Union Bay	57,180
Metlakahtla	59,043	Ward Cove	27,382
Molra Sound	24,539	Washington Bay	10,271
Nakat Inlet	42,817	Waterfall	110,922
Noyes Island	17,009	Wrangell	640,427
Petersburg	685,016	Yakutat	142,814
Point Conclusion	14,865	Yes Bay	113,525
Point Ellis	112,869		
Point Warde	45,276	Total	14,049,468
Port Armstrong	20,809		

*Comparative statement of principal places in first division.*

Name.	1913	1914	1915	1916	1917
Douglas	\$473,901	\$465,432	\$489,750	\$565,181	\$350,975
Haines	290,894	274,273	214,705	228,607	230,029
Juneau and Thane	3,240,681	4,017,710	3,597,231	4,277,684	3,328,741
Ketchikan	1,250,878	1,548,228	1,190,888	1,935,603	2,446,764
Loring	120,521	126,555	100,682	150,643	89,493
Petersburg	341,170	246,556	242,976	435,992	685,016
Sitka	218,101	167,451	142,376	165,572	224,083
Skagway	369,799	390,561	471,388	423,274	356,950
Treadwell	1,024,027	1,002,372	1,002,931	1,332,303	517,783
Wrangell	419,761	355,558	369,446	518,880	640,427
All other places	1,975,739	2,450,736	2,607,038	3,556,128	5,179,207
Total	9,725,472	11,075,532	10,329,411	13,589,867	14,049,46

*Value of merchandise shipped from United States to second division.*

Andreofsky	\$26,360	Old Hamilton	\$12,983
Bonanza	17,877	Point Barrow	3,879
Candle	35,724	Point Hope	2,867
Council	40,791	St. Michael	447,959
Deering	65,837	Solomon	14,648
Dickson	11,821	Stevens Village	6,298
Golovin	129,999	Taylor	7,454
Keewalik	16,233	Teller	55,851
Kiana	15,227	Unalakleet	22,690
Kotzebue	37,474	Wales	2,613
Marshall	110,043	York	14,226
Mountain Village	11,174		
Nome	882,495	Total	1,992,533



*Comparative statement of principal places in second division.*

Name.	1913	1914	1915	1916	1917
Candle.....	\$70,925	\$46,799	\$37,802	\$20,340	\$25,794
Deering.....	66,967	37,445	29,713	22,110	65,837
Golovin.....	109,759	76,024	69,379	94,520	129,999
Marshall.....		1,874	8,153	93,864	110,043
Nome.....	1,223,599	926,806	1,110,345	1,049,245	832,495
St. Michael.....	854,373	387,492	540,245	287,807	447,959
Teller.....	41,232	60,803	55,269	26,686	55,851
All other places.....	374,733	376,691	225,839	181,848	264,625
Total.....	2,741,588	1,913,936	2,076,745	1,776,400	1,992,533

*Value of merchandise shipped from United States to third division.*

Abercrombie.....	\$25,977	McDougall.....	\$19,789
Afognak.....	21,573	Makushin.....	59,639
Akutan.....	93,077	Matanuska.....	7,441
Alagnak.....	154,433	Morzhovoi Bay.....	16,152
Alliak.....	76,650	Naknek.....	447,896
Anchorage.....	3,800,693	Nelle Juan.....	92,569
Apokak.....	23,883	Nelson Lagoon.....	42,320
Atka.....	13,106	Nushagak.....	908,734
Bethel.....	74,604	Orca.....	132,801
Bristol Bay.....	1,117,674	Ouzinkie.....	3,612
Chignik.....	262,121	Pavlof.....	4,292
Chitina.....	184,456	Pirate Cove.....	34,686
Cold Bay.....	3,666	Port Graham.....	133,028
Cook's Inlet.....	138,972	Port Heiden.....	8,259
Copper Center.....	3,953	Port Moller.....	247,085
Cordova.....	2,727,390	Port Wells.....	9,498
Ekuik.....	103,753	Quinhagak.....	11,588
Ellamar.....	136,172	Sanak.....	8,946
False Pass.....	146,510	Sand Point.....	20,708
Fidalgo Bay.....	5,439	Seldovia.....	143,549
Fort Liscum.....	63,120	Seward.....	1,258,653
Herendeen Bay.....	379,317	Shepards Point.....	82,094
Hope.....	5,711	Shushana.....	44,853
Ikatan.....	167,587	Squaw Harbor.....	15,454
Karluk.....	28,896	Strelina.....	74,264
Katalla.....	826,827	Susitna.....	28,920
Kenai.....	252,929	Ugagak.....	106,455
Kennicott.....	754,489	Ugashik.....	61,474
King Cove.....	137,449	Unalaska.....	68,346
Knik.....	103,356	Unga.....	59,170
Kodiak.....	177,306	Uyak.....	103,716
Koggiung.....	265,013	Valdez.....	669,642
Kvichak.....	666,729	Wasilla.....	43,386
Larsen Bay.....	149,349	Wood River.....	15,363
Latouche.....	878,693		
McCarthy.....	269,387	Total.....	19,234,642

*Comparative statement of principal places in third division.*

Name.	1913	1914	1915	1916	1917
Anchorage.....			\$974,724	\$2,009,703	\$3,800,693
Bristol Bay.....	\$1,774,890	\$1,227,787	1,455,634	777,199	1,117,674
Chignik.....	277,339	160,394	185,499	217,260	262,121
Chitina.....	109,553	180,373	96,267	167,363	184,456
Cordova.....	832,067	783,534	963,762	1,923,001	2,727,390
Katalla.....	47,861	24,062	38,740	88,702	826,827
Kennicott.....	76,085	115,729	166,657	412,068	754,489
Kodiak.....	111,489	126,841	92,438	103,067	177,306
Kvichak.....	220,208		223,220	107,724	666,729
Latouche.....	106,323	217,958		500,543	878,693
Seward.....	231,704	315,296	637,257	855,561	1,258,653
Valdez.....	716,944	670,710	434,965	538,771	669,642
All other places.....	1,810,483	3,057,008	3,456,181	3,631,359	5,906,999
Total.....	6,314,946	6,018,269	8,710,344	11,935,320	19,234,642

*Value of merchandise shipped from United States to fourth division.*

Alatna .....	\$3,684	Livengood .....	\$21,674
Anvik .....	7,854	Long .....	18,869
Beaver .....	1,931	Louden .....	11,514
Bettles .....	63,835	McGrath .....	61,572
Chatanika .....	10,744	Minto .....	4,384
Chena .....	4,370	Napamute .....	10,810
Circle .....	70,270	Nenana .....	1,077,284
Dikeman .....	24,710	Nulato .....	50,131
Eagle .....	66,491	Ophir .....	7,939
Fairbanks .....	1,524,513	Rampart .....	31,353
Flat .....	43,333	Ruby .....	330,612
Fox .....	5,359	Russian Mission .....	9,047
Fort Yukon .....	56,722	Stevens Creek .....	14,544
Holikachuk .....	3,989	Tacotna .....	63,701
Holy Cross .....	90,674	Tanana .....	218,117
Hot Springs .....	131,731	Terminal .....	39,104
Iditarod .....	379,828	Tolovana .....	69,875
Kaltag .....	4,107		
Kokrines .....	5,240	Total .....	4,561,525
Koyokuk .....	21,610		

*Comparative statement of principal places in fourth division.*

Name.	1913	1914	1915	1916	1917
Chena .....	\$101,788	\$14,984	\$4,817	\$18,110	\$4,370
Eagle .....	33,364	65,142	36,667	43,971	66,491
Fairbanks .....	1,280,506	1,304,556	1,103,802	1,544,133	1,524,513
Hot Springs .....	115,490	158,308	128,084	153,116	131,731
Iditarod .....	482,189	323,343	219,047	371,784	379,828
Nenana .....				235,313	1,077,284
Ruby .....	289,750	169,262	209,776	370,469	330,612
Tanana .....	241,317	199,716	171,806	220,112	218,117
All other places .....	363,280	367,812	302,669	576,198	828,579
Total .....	2,907,684	2,603,123	2,176,668	3,533,206	4,561,525

*Merchandise shipped from United States to Alaska.*

Judicial divisions.	1911	1912	1913	1914	1915	1916	1917
First .....	\$5,492,416	\$9,769,224	\$9,725,472	\$11,075,532	\$10,329,411	\$13,589,867	\$14,049,468
Second .....	2,940,805	2,964,096	2,741,588	1,913,936	2,076,745	1,776,400	1,992,533
Third .....	4,688,702	6,500,461	6,314,946	6,018,269	8,710,344	11,935,320	19,234,642
Fourth .....	2,047,226	2,698,980	2,907,684	2,603,123	2,176,668	3,533,206	4,561,525
Total .....	15,169,149	21,932,761	21,699,690	21,610,880	23,293,168	30,834,793	39,838,168

*Gold and silver shipped to the United States.*

Judicial divisions.	1911	1912	1913	1914	1915	1916	1917
First .....	\$3,730,264	\$4,040,858	\$3,586,164	\$4,177,069	\$5,350,209	\$5,638,387	\$4,592,716
Second .....	3,246,498	3,138,881	2,239,057	2,602,273	2,796,952	3,035,631	2,573,186
Third .....	404,861	734,507	592,008	1,491,248	1,649,453	1,523,206	1,321,381
Fourth .....	7,318,071	8,117,459	6,542,037	6,399,315	6,293,787	6,134,893	6,452,157
Total .....	14,699,694	16,031,705	12,959,266	14,729,905	16,060,411	16,332,117	14,939,440

*Merchandise shipped to the United States.*

Judicial divisions.	1916	1917
First.....	\$16,586,723	\$25,885,733
Second.....	289,626	702,118
Third.....	45,156,608	49,432,283
Fourth.....	474,854	631,814
Total.....	62,507,811	76,651,968

These tables show the segregation by judicial divisions for several years of shipments of merchandise from, precious metals to, and a new feature. merchandise to the United States.

*Statement of number and tonnage of vessels entered and cleared for the years 1915, 1916, and 1917.*

## DOMESTIC TRADE.

Port.	1915				1916				1917			
	Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.	Num- ber.	Ton- nage.
Ketchikan.....	709	403,080	721	399,337	927	448,609	1,120	423,722	989	479,774	1,201	448,766
Wrangell.....	6	5,770	4	2,011	8	2,207	10	2,199	13	1,778	15	959
Juneau.....	17	31,898	14	23,666	31	29,590	38	26,643	46	22,180	47	21,389
Skagway.....	2	1,854	2	2,976	4	2,737	12	6,200	5	6,084	2	1,330
St. Michael.....	4	5,064	2	1,593	6	10,868	4	6,436	7	12,958	6	10,449
Nome.....	22	35,315	18	31,881	19	39,447	16	30,811	22	35,718	13	20,970
Unalaska.....	13	6,490	18	8,706	11	7,203	21	11,614	17	9,197	17	9,578
Cordova.....	11	16,876	24	36,980	28	43,982	46	77,635	27	48,970	61	107,863
Sulzer.....	8	5,967	14	8,264	17	12,174	25	23,528	25	20,864	20	17,399
Total.....	792	512,314	817	515,413	1,051	596,817	1,290	808,778	1,151	637,503	1,352	638,713

## FOREIGN TRADE.

Ketchikan.....	499	210,654	475	194,662	742	321,135	413	283,130	767	237,721	409	219,299
Wrangell.....	35	1,564	38	4,515	39	1,450	37	1,879	31	1,929	30	725
Juneau.....	1	1,496	2	879	4	2,614	4	1,118	9	3,517	1	1,354
Skagway.....	1	448	.....	.....	.....	.....	15	12,553	1	1,406	19	14,354
Eagle.....	45	18,674	47	20,201	56	23,036	48	19,979	51	20,859	51	20,366
St. Michael.....	.....	.....	.....	.....	.....	.....	1	448	.....	.....	.....	.....
Nome.....	13	5,045	16	1,593	13	5,586	10	1,614	15	4,552	13	2,780
Unalaska.....	1	298	2	301	3	1,881	.....	.....	3	1,058	1	329
Cordova.....	.....	.....	.....	.....	2	1,723	.....	.....	2	1,450	.....	.....
Sulzer.....	7	81	8	441	6	84	6	79	9	5,602	9	6,197
Total.....	602	238,259	585	222,622	866	357,509	539	320,800	888	278,094	532	264,002

*Recapitulation of customs business, by ports, for the year ended Dec. 31, 1917.*

Port.	Vessels entered.		Vessels cleared.		Entries taken.	Vessels documented.	Total vessels entered.	Total vessels cleared.
	Foreign.	Coast- wise.	Foreign.	Coast- wise.				
Cordova.....	2	27	.....	61	.....	14	29	61
Eagle.....	51	.....	51	.....	89	.....	51	51
Forty Mile.....	.....	.....	.....	.....	17	.....	.....	.....
Juneau.....	9	46	.....	47	112	193	55	47
Ketchikan.....	767	989	409	1,201	138	256	1,756	1,610
Nome.....	15	22	13	13	25	72	37	26
St. Michael.....	.....	7	.....	6	.....	.....	7	6
Skagway.....	1	5	19	2	819	2	6	21
Sulzer.....	9	25	9	20	.....	23	34	29
Unalaska.....	3	17	1	17	8	12	20	18
Wrangell.....	31	13	30	15	181	71	44	45
Total.....	888	1,151	532	1,382	1,389	643	2,039	1,914

*Comparative statement of customs business for the district, 1906-1917.*

Years.	Vessels entered.		Vessels cleared.		Entries taken.	Vessels documented.	Total vessels entered.	Total vessels cleared.
	Foreign.	Coast-wise.	Foreign.	Coast-wise.				
1906.....	338	436	304	426	1,996	305	824	730
1907.....	341	445	303	426	1,636	378	706	729
1908.....	280	410	197	406	1,113	152	690	603
1909.....	318	418	262	414	1,104	176	736	676
1910.....	393	451	366	419	1,190	190	844	785
1911.....	267	514	331	495	1,200	276	681	826
1912.....	318	770	282	643	1,292	349	1,088	925
1913.....	365	812	327	770	1,318	580	1,177	1,090
1914.....	378	805	349	810	1,069	576	1,183	1,169
1915.....	602	792	585	817	1,129	587	1,394	1,402
1916.....	866	1,051	539	1,290	1,669	581	1,917	1,829
1917.....	888	1,151	532	1,382	1,389	643	2,039	1,914

## APPENDIX D.

## Newspapers in Alaska.

<b>Anchorage:</b> Anchorage Times (daily and weekly). Anchorage Railroad Record (weekly). Anchorage Democrat (weekly).	<b>Kodiak:</b> Orphanage News Letter (monthly).
<b>Chitina:</b> The Chitina Leader (weekly).	<b>Nenana:</b> Nenana News (daily).
<b>Cordova:</b> The Alaska Times (daily). The Cordova Herald (daily).	<b>Nome:</b> Nome Nugget (triweekly). Industrial Worker (triweekly).
<b>Douglas:</b> Douglas Island News (weekly).	<b>Petersburg:</b> The Report (weekly).
<b>Fairbanks:</b> The Alaska Citizen (daily and weekly). The Churchman (quarterly). The Fairbanks News Miner (daily).	<b>Ruby:</b> The Record Citizen (weekly).
<b>Juneau:</b> The Alaska Daily Empire. Daily Alaska Dispatch.	<b>Seward:</b> The Seward Gateway (daily). The Alaska Weekly Post.
<b>Ketchikan:</b> Ketchikan Progressive-Miner (daily and weekly). Alaska Pioneer (monthly).	<b>Skagway:</b> The Daily Alaskan.
	<b>Sitka:</b> The Verstovian (monthly).
	<b>Unalakleet:</b> Northern Light (monthly).
	<b>Valdez:</b> The Valdez Miner (weekly).
	<b>Wrangell:</b> The Wrangell Sentinel (weekly).

## APPENDIX E.

## Incorporated Towns.

Name.	Date of incorporation.	Mayor.	Name.	Date of incorporation.	Mayor.
Chena.....	1904	W. S. Laymon.	Nome.....	1901	G. J. Lomen.
Cordova.....	1909	W. R. Hillery.	Petersburg.....	1910	Erick Ness.
Douglas.....	1902	Elmer E. Smith.	Seward.....	1912	Harry V. Hoben.
Eagle.....	1901	J. B. Howard.	Skagway.....	1908	Howard Ashley.
Fairbanks.....	1903	E. A. Suter.	Tanana.....	1912	B. B. Moeze.
Haines.....	1910	N. G. Hanson.	Sitka.....	1918	A. G. Shoup.
Iditarod.....	1911	Paul La Plant.	Valdez.....	1901	Anthony J. Dimond.
Juneau.....	1900	Emery Valentine.	Wrangell.....	1903	F. Matheson.
Ketchikan.....	1906	Arthur A. Wakefield.			

## APPENDIX F.

**Laws Relating to Alaska Passed at the First and Second Sessions of the Sixty-fifth Congress.**

[PUBLIC—No. 68—65TH CONGRESS.]

[H. R. 3932.]

**AN ACT** To prohibit the manufacture, distribution, storage, use, and possession in time of war of explosives, providing regulations for the safe manufacture, distribution, storage, use and possession of the same, and for other purposes.

\* \* \* \* \*

SEC. 4. That the word "person," when used herein, shall include States, Territories, the District of Columbia, Alaska, and other dependencies of the United States, and municipal subdivisions thereof, individual citizens, firms, associations, societies and corporations of the United States and of other countries at peace with the United States.

\* \* \* \* \*

SEC. 13. That the President, by and with the advice and consent of the Senate, may appoint in each State and in Alaska an explosives inspector, whose duty it shall be, under the direction of the Director of the Bureau of Mines, to see that this act is faithfully executed and observed. Each such inspector shall receive a salary of \$2,400 per annum. He may at any time be detailed for service by said director in the District of Columbia or in any State, Territory, or dependency of the United States. All additional employees required in carrying out the provisions of this act shall be appointed by the Director of the Bureau of Mines, subject to the approval of the Secretary of the Interior.

\* \* \* \* \*

Approved, October 6, 1917.

[PUBLIC—No. 94—65TH CONGRESS.]

[S. 2334.]

**AN ACT** To authorize absence by homestead settlers and entrymen and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That during the pendency of the existing war any homestead settler or entryman shall be entitled to a leave of absence from his land for the purpose of performing farm labor, and such absence, while actually engaged in farm labor, shall, upon compliance with the terms of this act, be counted as constructive residence: *Provided*, That each settler or entryman within fifteen days after leaving his claim for the purpose herein provided shall file notice thereof in the United States Land Office, and at the expiration of the calendar year file in said land office of the district wherein his claim is situated a written statement, under oath and corroborated by two witnesses, giving the date or dates when he left his claim, date or dates of return thereto, and where and for whom he was engaged in farm labor during such period or periods of absence: *Provided further*, That nothing herein shall excuse any homestead settler or entryman from making improvements or performing the cultivation required by applicable law upon his claim or entry: *Provided further*, That the provisions of this act shall apply only to homestead settlers and entrymen who may have filed their application prior to the passage of this act. The Secretary of the Interior is authorized to provide rules and regulations for carrying this act into effect.

Approved, December 20, 1917.

[PUBLIC—No. 106—65TH CONGRESS.]

[S. 1854.]

**AN ACT** To save daylight and to provide standard time for the United States.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That, for the purpose of establishing the standard time of the United States, the territory of continental United

States shall be divided into five zones in the manner hereinafter provided. The standard time of the first zone shall be based on the mean astronomical time of the seventy-fifth degree of longitude west from Greenwich; that of the second zone on the ninetieth degree; that of the third zone on the one hundred and fifth degree; that of the fourth zone on the one hundred and twentieth degree; and that of the fifth zone, which shall include only Alaska, on the one hundred and fiftieth degree. That the limits of each zone shall be defined by an order of the Interstate Commerce Commission, having regard for the convenience of commerce and the existing junction points and division points of common carriers engaged in commerce between the several States and with foreign nations, and such order may be modified from time to time.

SEC. 2. That within the respective zones created under the authority hereof the standard time of the zone shall govern the movement of all common carriers engaged in commerce between the several States or between a State and any of the Territories of the United States, or between a State or the Territory of Alaska and any of the Insular possessions of the United States or any foreign country. In all statutes, orders, rules, and regulations relating to the time of performance of any act by and officer or department of the United States, whether in the legislative, executive, or judicial branches of the Government, or relating to the time within which any rights shall accrue or determine, or within which any act shall or shall not be performed by any person subject to the jurisdiction of the United States, it shall be understood and intended that the time shall be the United States standard time of the zone within which the act is to be performed.

SEC. 3. That at two o'clock antemeridian of the last Sunday in March of each year the standard time of each zone shall be advanced one hour, and at two o'clock antemeridian of the last Sunday in October in each year the standard time of each zone shall, by the retarding of one hour, be returned to the mean astronomical time of the degree of longitude governing said zone, so that between the last Sunday in March at two o'clock antemeridian and the last Sunday in October at two o'clock antemeridian in each year the standard time in each zone shall be one hour in advance of the mean astronomical time of the degree of longitude governing each zone, respectively.

SEC. 4. That the standard time of the first zone shall be known and designated as United States Standard Eastern Time; that of the second zone shall be known and designated as United States Standard Central Time; that of the third zone shall be known and designated as United States Standard Mountain Time; that of the fourth zone shall be known and designated as United States Standard Pacific Time; and that of the fifth zone shall be known and designated as United States Standard Alaska Time.

SEC. 5. That all acts and parts of acts in conflict herewith are hereby repealed.

Approved, March 19, 1918.

[PUBLIC—No. 126—65TH CONGRESS.]

[H. R. 2816.]

#### AN ACT To promote export trade, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the words "export trade" wherever used in this act means solely trade or commerce in goods, wares, or merchandise exported, or in the course of being exported from the United States or any Territory thereof to any foreign nation; but the words "export trade" shall not be deemed to include the production, manufacture, or selling for consumption or for resale, within the United States or any Territory thereof, of such goods, wares, or merchandise, or any act in the course of such production, manufacture, or selling for consumption or for resale.

That the words "trade within the United States" wherever used in this act mean trade or commerce among the several States or in any Territory of the United States, or in the District of Columbia, or between any such Territory and another, or between any such Territory or Territories and any State or States of the District of Columbia, or between the District of Columbia and any State or States.

That the word "association" wherever used in this act means any corporation or combination, by contract or otherwise, of two or more persons, partnerships, or corporations.

SEC. 2. That nothing contained in the act "An act to protect trade and commerce against unlawful restraints and monopolies," approved July second, eighteen hundred and ninety, shall be construed as declaring to be illegal an association entered into for the sole purpose of engaging in export trade and actually engaged solely in such export trade, or an agreement made or act done in the course of export trade by such association, provided such association, agreement, or not is not in restraint of trade within the United States, and is not in restraint of the export trade of any domestic competitor of such association: *And provided further*, That such association does not, either in the United States or elsewhere, enter into any agreement, understanding, or conspiracy, or do any act which artificially or intentionally enhances or depresses prices within the United States of commodities of the class exported by such association, or which substantially lessens competition within the United States or otherwise restrains trade therein.

SEC. 3. That nothing contained in section seven of the act entitled "An act to supplement existing laws against unlawful restraints and monopolies, and for other purposes," approved October fifteenth, nineteen hundred and fourteen, shall be construed to forbid the acquisition or ownership by any corporation of the whole or any part of the stock or other capital of any corporation organized solely for the purpose of engaging in export trade, and actually engaged solely in such export trade, unless the effect of such acquisition or ownership may be to restrain trade or substantially lessen competition within the United States.

SEC. 4. That the prohibition against "unfair methods of competition" and the remedies provided for enforcing said prohibition contained in the act entitled "An act to create a Federal Trade Commission, to define its powers and duties, and for other purposes," approved September twenty-sixth, nineteen hundred and fourteen, shall be construed as extending to unfair methods of competition used in export trade against competitors engaged in export trade, even though the acts constituting such unfair methods are done without the territorial jurisdiction of the United States.

SEC. 5. That every association now engaged solely in export trade, within sixty days after the passage of this act, and every association entered into hereafter which engages solely in export trade, within thirty days after its creation, shall file with the Federal Trade Commission a verified written statement setting forth the location of its offices or places of business and the names and addresses of all its officers and of all its stockholders or members, and if a corporation, a copy of its certificate or articles of incorporation and by-laws, and if unincorporated a copy of its articles or contract of association, and on the first day of January of each year thereafter it shall make a like statement of the location of its offices or places of business and the names and addresses of all its officers and of all its stockholders or members and of all amendments to and changes in its articles or certificate of incorporation or in its articles or contract of association. It shall also furnish to the commission such information as the commission may require as to its organization, business, conduct, practices, management, and relation to other associations, corporations, partnerships, and individuals. Any association which shall fail so to do shall not have the benefit of the provisions of section two and section three of this act, and it shall also forfeit to the United States the sum of \$100 for each and every day of the continuance of such failure, which forfeiture shall be payable into the Treasury of the United States and shall be recoverable in a civil suit in the name of the United States brought in the district where the association has its principal office, or in any district in which it shall do business. It shall be the duty of the various district attorneys, under the direction of the Attorney General of the United States, to prosecute for the recovery of the forfeiture. The costs and expenses of such prosecution shall be paid out of the appropriation for the expenses of the courts of the United States.

Whenever the Federal Trade Commission shall have reason to believe that an association or any agreement made or act done by such association is in restraint of trade within the United States or in restraint of the export trade of any domestic competitor of such association, or that an association either in the United States or elsewhere has entered into any agreement, understanding, or conspiracy, or done any act which artificially or intentionally enhances or depresses prices within the United States of commodities of the class exported by such association, or which substantially lessens competition within the United States or otherwise restrains trade therein, it shall summon such association, its officers, and agents to appear before it, and thereafter

conduct an investigation into the alleged violations of law. Upon investigation, if it shall conclude that the law has been violated, it may make to such association recommendations for the readjustment of its business in order that it may thereafter maintain its organization and management and conduct its business in accordance with law. If such association fails to comply with the recommendations of the Federal Trade Commission, said commission shall refer its findings and recommendations to the Attorney General of the United States for such action thereon as he may deem proper.

For the purpose of enforcing these provisions the Federal Trade Commission shall have all the powers, so far as applicable, given it in "An act to create a Federal Trade Commission, to define its powers and duties, and for other purposes."

Approved, April 10, 1918.

[PUBLIC—No. 131—65TH CONGRESS.]

[H. R. 9504.]

AN ACT To amend section four thousand and sixty-seven of the Revised Statutes by extending its scope to include women.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That section four thousand and sixty-seven of the Revised Statutes be, and the same is hereby, amended so as to read as follows:

"SEC. 4067. Whenever there is a declared war between the United States and any foreign nation or government, or any invasion or predatory incursion is perpetrated, attempted, or threatened against the territory of the United States by any foreign nation or government, and the President makes public proclamation of the event, all natives, citizens, denizens, or subjects of the hostile nation or government, being of the age of fourteen years and upward, who shall be within the United States and not actually naturalized, shall be liable to be apprehended, restrained, secured, and removed as alien enemies. The President is authorized, in any such event, by his proclamation thereof, or other public act, to direct the conduct to be observed, on the part of the United States, toward the aliens who become so liable; the manner and degree of the restraint to which they shall be subject and in what cases, and upon what security their residence shall be permitted, and to provide for the removal of those who, not being permitted to reside within the United States, refuse or neglect to depart therefrom; and to establish any other regulations which are found necessary in the premises and for the public safety."

Approved, April 16, 1918.

[PUBLIC—No. 142—65TH CONGRESS.]

[H. R. 9832.]

AN ACT To authorize the incorporated town of Seward, Alaska, to issue bonds in any sum not exceeding \$25,000 for the purpose of constructing dikes, flumes, and other works to confine the waters of Lowell Creek for the protection of said town.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the incorporated town of Seward, Alaska, is hereby authorized and empowered to issue bonds in any sum not exceeding \$25,000 for the purpose of constructing dikes, flumes, and other protection to confine the waters of Lowell Creek, and to keep said waters from running over and upon the town of Seward.

Before said bonds shall be issued a special election shall be ordered by the common council of the town of Seward, at which election the question of whether such bonds shall be issued shall be submitted to the qualified electors of said town of Seward whose names appear on the last assessment roll of said town for municipal taxation. Thirty days' notice of any such election shall be given by publication thereof in a newspaper printed and published and of general circulation in said town before the day fixed for such election.

The registration for such election, the manner of conducting the same, and the canvass of the returns of said election shall be, as near as practicable, in accordance with the requirements of law in general or special elections in said municipality, and said bonds shall be issued only upon the condition that a majority of the votes cast at such election in said town shall be in favor of issuing said bonds.



The bonds above specified, when authorized to be issued as hereinbefore provided, shall bear interest at a rate not to exceed eight per centum per annum, payable semiannually, and shall not be sold for less than their par value with accrued interest and shall be in denominations not exceeding \$1,000 each, the principal to be due in twenty years from date thereof: *Provided, however,* That the common council of said town of Seward may reserve the right to pay off such bonds in their numerical order at the rate of \$5,000 thereof per annum from and after the expiration of five years from their date. Principal and interest shall be payable in lawful money of the United States of America at the office of the town treasurer, or at such bank in the city of New York, in the State of New York, or such place as may be designated by the common council of the town of Seward; the place of payment to be mentioned in the bonds: *And provided further,* That each and every such bond shall have the written signature of the mayor and clerk of said town of Seward and also bear the seal of said town.

No part of the funds arising from the sale of said bonds shall be used for any purpose other than specified in this act. Said bonds shall be sold only in such amounts as the common council shall direct, and the proceeds thereof shall be disbursed under the limitations hereinbefore imposed and under the order and direction of said common council, from time to time, as the same may be required for the purposes aforesaid.

Approved, May 1, 1918.

[PUBLIC—No. 180—65TH CONGRESS.]

[H. R. 8563.]

AN ACT To amend the homestead law in its application to Alaska, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the act of Congress entitled "An act to amend the United States homestead law in its application to Alaska, and for other purposes," approved July eighth, nineteen hundred and sixteen, is hereby amended to read as follows:

"SECTION 1. That every person who is qualified under existing laws to make homestead entry of the public lands of the United States who has settled upon or who shall hereafter settle upon any of the public lands of the United States situated in the District of Alaska, whether surveyed or unsurveyed, with the intention of claiming the same under the homestead laws, shall, subject to the provisions and limitations of the act approved March third, nineteen hundred and three, chapter one thousand and two, United States Statutes at Large, page one thousand and twenty-eight, be entitled to enter one hundred and sixty acres or a less quantity of unappropriated public land in said District of Alaska, and no more; and a former homestead entry in any other State or Territory shall not be a bar to a homestead entry in Alaska: *Provided,* That nothing herein contained shall be construed to limit or curtail the area of any homestead claim heretofore lawfully initiated.

"SEC. 2. That if the system of public surveys has not been extended over the land included in a homestead entry, the entryman may, after due compliance with the terms of the homestead law in the matter of residence, cultivation, and improvement, submit to the register and receiver a showing as to such compliance, duly corroborated by two witnesses; and if such evidence satisfactorily shows that the homesteader is in a position to submit acceptable final proof the surveyor general of the Territory will be so advised and will, not later than the next succeeding surveying season, issue proper instructions for the survey of the land so entered, without expense to the entryman, who may thereafter submit final proof as in similar entries of surveyed lands. So far as practicable, such survey shall follow the general system of public-land surveys, and the entryman shall conform his boundaries thereto: *Provided,* That nothing herein shall prevent the homesteader from securing earlier action on his entry by a special survey at his own expense if he so elects.

"SEC. 3. That there shall be excepted from homestead settlement and entry under this act the lands in Annette and Pribilof Islands, the islands leased or occupied for the propagation of foxes, and such other lands as have been or may be reserved or withdrawn from settlement or entry."

Approved, June 28, 1918.

[PUBLIC—No. 186—65TH CONGRESS.]

[S. 1553.]

AN ACT To give effect to the convention between the United States and Great Britain for the protection of migratory birds, concluded at Washington, August sixteenth, nineteen hundred and sixteen, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this act shall be known by the short title of the "Migratory Bird Treaty Act."*

SEC. 2. That unless and except as permitted by regulations made as herein-after provided, it shall be unlawful to hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry or cause to be carried by any means whatever, receive for shipment, transportation, or carriage, or export, at any time or in any manner, any migratory bird included in the terms of the convention between the United States and Great Britain for the protection of migratory birds concluded August sixteenth, nineteen hundred and sixteen, or any part, nest, or egg of any such bird.

SEC. 3. That subject to the provisions and in order to carry out the purposes of the convention, the Secretary of Agriculture is authorized and directed, from time to time, having due regard to the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds, to determine when, to what extent, if at all, and by what means, it is compatible with the terms of the convention to allow hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any such bird, or any part, nest, or egg thereof, and to adopt suitable regulations permitting and governing the same, in accordance with such determinations, which regulations shall become effective when approved by the President.

SEC. 4. That it shall be unlawful to ship, transport, or carry, by any means whatever, from one State, Territory, or District to or through another State, Territory, or District, or to or through a foreign country, any bird, or any part, nest, or egg thereof, captured, killed, taken, shipped, transported, or carried at any time contrary to the laws of the State, Territory, or District in which it was captured, killed, or taken, or from which it was shipped, transported, or carried. It shall be unlawful to import any bird, or any part, nest, or egg thereof, captured, killed, taken, shipped, transported, or carried contrary to the laws of any Province of the Dominion of Canada in which the same was captured, killed, or taken, or from which it was shipped, transported, or carried.

SEC. 5. That any employee of the Department of Agriculture authorized by the Secretary of Agriculture to enforce the provisions of this act shall have power, without warrant, to arrest any person committing a violation of this act in his presence or view and to take such person immediately for examination or trial before an officer or court of competent jurisdiction; shall have power to execute any warrant or other process issued by an officer or court of competent jurisdiction for the enforcement of the provisions of this act; and shall have authority, with a search warrant, to search any place. The several judges of the courts established under the laws of the United States, and United States commissioners may, within their respective jurisdictions, upon proper oath or affirmation showing probable cause, issue warrants in all such cases. All birds, or parts, nests, or eggs thereof, captured, killed, taken, shipped, transported, carried, or possessed contrary to the provisions of this act or of any regulations made pursuant thereto shall, when found, be seized by any such employee, or by any marshal or deputy marshal, and, upon conviction of the offender or upon judgment of a court of the United States that the same were captured, killed, taken, shipped, transported, carried, or possessed contrary to the provisions of this act or of any regulation made pursuant thereto, shall be forfeited to the United States and disposed of as directed by the court having jurisdiction.

SEC. 6. That any person, association, partnership, or corporation who shall violate any of the provisions of said convention or of this act, or who shall violate or fail to comply with any regulation made pursuant to this act, shall be guilty of a misdemeanor and upon conviction thereof shall be fined not more than \$500 or be imprisoned not more than six months, or both.

SEC. 7. That nothing in this act shall be construed to prevent the several States and Territories from making or enforcing laws or regulations not inconsistent with the provisions of said convention or of this act, or from making or enforcing laws or regulations which shall give further protection to migratory birds, their nests, and eggs, if such laws or regulations do not extend the open seasons for such birds beyond the dates approved by the President in accordance with section three of this act.

SEC. 8. That until the adoption and approval, pursuant to section three of this act, of regulations dealing with migratory birds and their nests and eggs, such migratory birds and their nests and eggs as are intended and used exclusively for scientific or propagating purposes may be taken, captured, killed, possessed, sold, purchased, shipped, and transported for such scientific or propagating purposes if and to the extent not in conflict with the laws of the State, Territory, or District in which they are taken, captured, killed, possessed, sold, or purchased, or in or from which they are shipped or transported if the packages containing the dead bodies or the nests or eggs of such birds when shipped and transported shall be marked on the outside thereof so as accurately and clearly to show the name and address of the shipper and the contents of the package.

SEC. 9. That the unexpended balances of any sums appropriated by the agricultural appropriation acts for the fiscal years nineteen hundred and seventeen and nineteen hundred and eighteen, for enforcing the provisions of the act approved March fourth, nineteen hundred and thirteen, relating to the protection of migratory game and insectivorous birds, are hereby reappropriated and made available until expended for the expenses of carrying into effect the provisions of this act and regulations made pursuant thereto, including the payment of such rent, and the employment of such persons and means, as the Secretary of Agriculture may deem necessary, in the District of Columbia and elsewhere, cooperation with local authorities in the protection of migratory birds, and necessary investigations connected therewith: *Provided*, That no person who is subject to the draft for service in the Army or Navy shall be exempted or excused from such service by reason of his employment under this act.

SEC. 10. That if any clause, sentence, paragraph, or part of this act shall, for any reason, be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

SEC. 11. That all acts or parts of acts inconsistent with the provisions to this act are hereby repealed.

SEC. 12. Nothing in this act shall be construed to prevent the breeding of migratory game birds on farms and preserves and the sale of birds so bred under proper regulation for the purpose of increasing the food supply.

SEC. 13. That this act shall become effective immediately upon its passage and approval.

Approved, July 3, 1918.

[PUBLIC—No. 190—65TH CONGRESS.]

[H. R. 11247.]

AN ACT Providing for the protection of the uniform of friendly nations, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That it shall be unlawful for any person, with intent to deceive or mislead, within the United States or Territories, possessions, waters, or places subject to the jurisdiction of the United States, to wear any naval, military, police, or other official uniform, decoration, or regalia of any foreign State, nation, or Government with which the United States is at peace, or any uniform, decoration, or regalia so nearly resembling the same as to be calculated to deceive, unless such wearing thereof be authorized by such State, nation, or Government.

Any person who violates the provisions of this Act shall upon conviction be punished by a fine not exceeding \$300 or imprisonment for not exceeding six months, or by both such fine and imprisonment.

Approved, July 8, 1918.

[PUBLIC—No. 205—65TH CONGRESS.]

[S. 4555.]

AN ACT To validate certain public-land entries.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That all entries heretofore erroneously allowed for lands opened to entry under the Act approved February twentieth, nineteen hundred and four (Thirty-third Statutes at Large, page forty-six), and the Act of February sixteenth, nineteen hundred and eleven (Thirty-sixth Statutes at Large, page nine hundred and thirteen), to persons who had previously exhausted their homestead rights, are hereby ratified and confirmed; and any such entry which has been canceled for the reason given shall be reinstated in the absence of conflicts and proceed to patent upon compliance with the law under which the entry was made.

Approved, July 25, 1918.

[PUBLIC—No. 216—65TH CONGRESS.]

[H. R. 8004.]

AN ACT Authorizing the resurvey or retracement of lands heretofore returned as surveyed public lands of the United States under certain conditions.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That upon the application of the owners of three-fourths of the privately owned lands in any township covered by public-land surveys, more than fifty per centum of the area of which townships is privately owned, accompanied by a deposit with the United States surveyor general for the proper State, or if there be no surveyor general of such State, then with the Commissioner of the General Land Office, of the proportionate estimated cost, inclusive of the necessary work of the resurvey or retracement of all the privately owned lands in said township, the Commissioner of the General Land Office, subject to the supervisory authority of the Secretary of the Interior, shall be authorized in his discretion to cause to be made a resurvey or retracement of the lines of said township and to set permanent corners and monuments in accordance with the laws and regulations governing surveys and resurveys of public lands; that the sum so deposited shall be held by the surveyor general or commissioner when ex officio surveyor general and may be expended in payment of the cost of such survey, including field and office work, and any excess over the cost of such survey and the expenses incident thereto shall be repaid pro rata to the person making said deposits or their legal representatives; that the proportionate cost of the field and office work for the resurvey or retracement of any public lands in such township shall be paid from the current appropriation for the survey and resurvey of public lands, in addition to the portion of such appropriation otherwise allowed by law for resurveys and retracements; that similar resurveys and retracements may be made on the application, accompanied by the requisite deposit, of any court of competent jurisdiction, the returns of such resurvey or retracement to be submitted to the court; that the Secretary of the Interior is authorized to make all necessary rules and regulations to carry this act into full force and effect.

Approved, September 21, 1918.

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APPENDIX G.

## Government Publications on Alaska.

This statement has been prepared in order to give information to the public regarding Government work in and publications on Alaska. There have been included lists of the principal publications of the Interior Department and brief notes regarding the publications of other departments. Publications on early explorations and on topics not referred to may often be obtained by purchase from the Superintendent of Documents, Government Printing Office, Washing-

ton, D. C. A circular giving general information regarding the Territory may be obtained from the Secretary of the Interior.

Correspondence should in all cases be addressed to the office or officer mentioned.

#### **PUBLIC LANDS.**

Circulars regarding the manner of obtaining title to public lands may be obtained from the Commissioner of the General Land Office, Washington, D. C., to whom all correspondence relating to public lands should be addressed.

#### **FISHERIES.**

Publications on the fish industry may be obtained from the Bureau of Fisheries, Washington, D. C., which will forward a list of publications free of charge.

#### **AGRICULTURAL AND STOCK RAISING.**

Publications on agricultural experiments and development and on stock raising are issued by the Department of Agriculture, and information concerning same may be obtained by addressing the Secretary of Agriculture, Washington, D. C.

#### **NAVIGATION.**

Charts of the navigable waters, Coast Pilots, and Tide Tables may be purchased from the Coast and Geodetic Survey, Washington, D. C. (catalogue free); papers on astronomical and magnetic work, coast-pilot notes, etc., are published by the Coast and Geodetic Survey, Washington, D. C., and are furnished gratis on application. A list of such publications will be forwarded free of charge.

#### **ROADS AND TRAILS.**

Roads and trails are being constructed by the Alaska Road Commission, which is under the supervision of the Secretary of War. Information regarding the progress of this work is contained in the reports of the Secretary of War, which may be consulted at the principal libraries.

#### **NATIVE ARTS AND LANGUAGES.**

Studies of arts and languages have been made from time to time by the National Museum and the Bureau of American Ethnology, Washington, D. C., to which communications on these subjects should be addressed.

#### **POST-ROUTE MAP.**

A map 33½ by 48½ inches on a scale of 40 miles to the inch, showing the post offices and mail routes in Alaska, may be obtained from the Post Office Department, Washington, D. C., for 80 cents. Remittance should be by money order, payable to the Third Assistant Postmaster General, Post Office Department, Washington, D. C. Postage stamps can not be accepted.

#### **GOVERNMENT RAILROAD.**

The first report of the Alaskan Engineering Commission, which is constructing the Government railroad in Alaska, has been issued as House Document No. 610, Sixty-fourth Congress, first session. This report includes an account of operations from March 12, 1914, to December 31, 1915. The report may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 75 cents; it may also be obtained from Senators and Representatives until their limited quota is exhausted.

#### **EDUCATION AND REINDEER SERVICE.**

The schools for the education of natives, their medical relief, and the reindeer industry are under the supervision of the Commissioner of Education, to whom communications relating to these subjects should be addressed.

The governor of Alaska is ex officio superintendent of schools for the education of white children.

The following reports on schools for natives and on the reindeer service have been issued by the Bureau of Education. An asterisk (\*) indicates that the Bureau of Education's stock of the paper is exhausted. These papers can generally be consulted at the principal libraries throughout the country. If a price is given, these publications may be purchased for that amount from the Superintendent of Documents, Government Printing Office. In the case of the reports on native schools the price is for the complete volume, as the Superintendent of Documents has no separates for sale.

## NATIVE SCHOOLS.

- \*1886. Report on education in Alaska, by Sheldon Jackson, 80 pp.
- 1889. In Annual Report for 1889, vol. 2, pp. 753-764. Cloth, 75 cents.
- 1890. In Annual Report for 1890, vol. 2, pp. 1245-1300. Cloth, 90 cents.
- \*1891. In Annual Report for 1891, vol. 2, pp. 925-960. Cloth, 75 cents.
- 1892. In Annual Report for 1892, vol. 2, pp. 873-892. Cloth, 60 cents.
- \*1893. In Annual Report for 1893, vol. 2, pp. 1705-1748. Cloth, 70 cents.
- \*1894. In Annual Report for 1894, vol. 2, pp. 1451-1492. Cloth, 90 cents.
- \*1895. In Annual Report for 1895, vol. 2, pp. 1425-1455. Cloth, 85 cents.
- \*1896. In Annual Report for 1896, vol. 2, pp. 1435-1468. Cloth, 90 cents.
- \*1897. In Annual Report for 1897, vol. 2, pp. 1601-1646. Cloth, 80 cents.
- \*1898. In Annual Report for 1898, vol. 2, pp. 1753-1771. Cloth, 90 cents.
- 1899. In Annual Report for 1899, vol. 2, pp. 1372-1402. Cloth, 90 cents.
- 1900. In Annual Report for 1900, vol. 2, pp. 1733-1785. Cloth, 95 cents.
- 1901. In Annual Report for 1901, vol. 2, pp. 1459-1480. Cloth, 85 cents.
- 1902. In Annual Report for 1902, vol. 2, pp. 1229-1256. Cloth, 90 cents.
- 1903. In Annual Report for 1903, vol. 2, pp. 2333-2364. Cloth, 85 cents.
- 1904. In Annual Report for 1904, vol. 2, pp. 2257-2268. Cloth, \$1.25.
- \*1905. In Annual Report for 1905, vol. 1, pp. 267-282. Cloth, 75 cents.
- \*1906. In Annual Report for 1906, vol. 1, pp. 237-250. Cloth, 75 cents.
- \*1907. In Annual Report for 1907, vol. 1, pp. 371-396. Cloth, 60 cents.
- \*1908. In Annual Report for 1908, vol. 2, pp. 1023-1046. Cloth, 75 cents.
- \*1909. In Annual Report for 1909, vol. 2, pp. 1297-1320. Cloth, 65 cents.
- \*1910. In Annual Report for 1910, vol. 2, pp. 1343-1363. Cloth, 65 cents.
- \*1911. In Annual Report for 1911, vol. 2, pp. 1379-1395. Cloth, 65 cents.
- \*1912. In Annual Report for 1912, vol. 1, pp. 407-415.
- 1913. In Annual Report for 1913, vol. 1, pp. 632-640.
- \*1914. In Annual Report for 1914, vol. 1, pp. 633-639. Cloth, 65 cents.
- 1915. In Annual Report for 1915, vol. 1, pp. 635-639.
- 1916. In Annual Report for 1916, vol. 1, pp. 487-490.

## REINDEER SERVICE.

- \*1893. Senate Misc. Document No. 22, 52d Cong., 2d sess. Sheep, \$2.
- 1894. Senate Document No. 92, 53d Cong., 3d sess. Cloth, 25 cents.
- \*1895. Senate Document No. 111, 54th Cong., 1st sess. Cloth, 35 cents.
- \*1896. Senate Document No. 49, 54th Cong., 2d sess. Cloth, 35 cents.
- \*1897. Senate Document No. 30, 55th Cong., 2d sess. Cloth, 20 cents.
- \*1898. Senate Document No. 34, 55th Cong., 2d sess. Cloth, 40 cents.
- \*1899. Senate Document No. 245, 56th Cong., 2d sess. Cloth, 40 cents.
- \*1900. Senate Document No. 206, 56th Cong., 2d sess. Cloth, 40 cents.
- \*1901. Senate Document No. 98, 57th Cong., 1st sess. Cloth, 50 cents.
- \*1902. Senate Document No. 70, 57th Cong., 2d sess. Cloth, 40 cents.
- \*1903. Senate Document No. 210, 58th Cong., 2d sess. Cloth, 50 cents.
- 1904. Senate Document No. 61, 58th Cong., 2d sess. Cloth, 50 cents.
- \*1905. Senate Document No. 499, 59th Cong., 1st sess. Cloth, 60 cents.
- \*1906. In Annual Report of the Commissioner of Education for 1906, vol. 1, pp. 237-255. Paper, 15 cents.
- \*1907. In Annual Report of the Commissioner of Education for 1907, vol. 1, pp. 371-411. Cloth, 60 cents.
- \*1908. In Annual Report of the Commissioner of Education for 1908, vol. 2, pp. 1046-1056. Cloth, 75 cents.
- \*1909. In Annual Report of the Commissioner of Education for 1909, vol. 2, pp. 1321-1326. Cloth, 65 cents.
- \*1910. In Annual Report of the Commissioner of Education for 1910, vol. 2, pp. 1364-1370. Cloth, 65 cents.
- \*1911. In Annual Report of the Commissioner of Education for 1911, vol. 2, pp. 1395-1402. Cloth, 65 cents.

- \*1912. In Annual Report of the Commissioner of Education for 1912, vol. 1, pp. 415-420.
- 1913. In Annual Report of the Commissioner of Education for 1913, vol. 1, pp. 641, 642.

## ALASKA SCHOOL AND REINDEER SERVICE.

- \*1912. Bulletin of the Bureau of Education, 1913, No. 36. Paper, 10 cents.
- \*1913. Bulletin of the Bureau of Education, 1914, No. 31. Paper, 25 cents.
- 1914. Bulletin of the Bureau of Education, 1915, No. 48. Paper.
- \*1915. Bulletin of the Bureau of Education, 1916, No. 47. Paper.

## GEOLOGY, MINERAL RESOURCES, WATER RESOURCES, AND MAPS.

Publications on the geology, mineral resources, and water resources, and maps of portions of Alaska are issued by the Geological Survey. In the following list, arranged geographically, are given the titles of some of the recent publications of the Geological Survey.

All of these publications can be obtained or consulted in the following ways:

1. A limited number are printed for the Geological Survey, Washington, D. C., from which they can be obtained, free of charge (except certain maps), on application.
2. A certain number are delivered to Senators and Representatives in Congress for distribution.
3. Other copies are deposited with the superintendent of documents, Washington, D. C., from whom they can be had at prices slightly above cost.
4. Copies of all Government publications are furnished to the principal public libraries throughout the United States, where they can be consulted by those interested.

An asterisk (\*) indicates that the Geological Survey's stock of the paper is exhausted. If a price is given, the document can be had for that amount from the Superintendent of Documents, Government Printing Office, Washington, D. C.

A complete list can be had on application to the Director of the Geological Survey.

## GENERAL.

## REPORTS.

- \*The geography and geology of Alaska, a summary of existing knowledge, by A. H. Brooks, with a section on climate, by Cleveland Abbe, jr., and a topographic map and description thereof, by R. U. Goode. Professional Paper 45, 1906, 327 pp. \$1.
- Placer mining in Alaska in 1904, by A. H. Brooks. In Bulletin 259, 1905, pp. 18-31.
- The mining industry in 1905, by A. H. Brooks. In Bulletin 284, 1906, pp. 4-9.
- \*The mining industry in 1906, by A. H. Brooks. In Bulletin 314, 1907, pp. 19-39. 30 cents.
- \*The mining industry in 1907, by A. H. Brooks. In Bulletin 345, 1908, pp. 30-53. 45 cents.
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- Railway routes, by A. H. Brooks. In Bulletin 284, 1906, pp. 10-17.

- \*Railway routes from the Pacific seaboard to Fairbanks, Alaska, by A. H. Brooks. In Bulletin 520, 1912, pp. 45-88.
- \*Geologic features of Alaskan metalliferous lodes, by A. H. Brooks. In Bulletin 480, 1911, pp. 43-93.
- \*The mineral deposits of Alaska, by A. H. Brooks. In Bulletin 592, 1914, pp. 18-44.
- \*The future of gold-placer mining in Alaska, by A. H. Brooks. In Bulletin 622, 1915, pp. 69-79.
- \*Tin resources of Alaska, by F. L. Hess. In Bulletin 520, 1912, pp. 89-92. 50 cents.
- The petroleum fields of the Pacific coast of Alaska, with an account of the Bering River coal deposits, by G. C. Martin. Bulletin 250, 1905, 64 pp.
- Alaska coal and its utilization, by A. H. Brooks. Bulletin 442J, reprinted 1914.
- \*The possible use of peat fuel in Alaska, by C. A. Davis. In Bulletin 379, 1909, pp. 63-66. 50 cents.
- The preparation and use of peat as a fuel, by C. A. Davis. In Bulletin 442, 1910, pp. 101-132.
- \*Methods and costs of gravel and placer mining in Alaska, by C. W. Purlington. Bulletin 263, 1905, 362 pp. (Abstract in Bulletin 259, 1905, pp. 32-46. 15 cents.)
- \*Prospecting and mining gold placers in Alaska, by J. P. Hutchins. In Bulletin 345, 1908, pp. 54-77. 45 cents.
- \*Geographic dictionary of Alaska, by Marcus Baker; second edition prepared by James McCormick. Bulletin 209, 1906, 690 pp. 50 cents.
- Antimony deposits of Alaska, by A. H. Brooks. Bulletin 649, 1916, 67 pp.
- Alaska's mineral supplies, by A. H. Brooks. Bulletin 686P, pp. 1-14.

#### *In preparation.*

- The Mesozoic stratigraphy of Alaska, by G. C. Martin.
- The mineral springs of Alaska, by G. A. Waring. Water-Supply Paper 418.
- The tungsten lodes of Alaska, by J. B. Mertie, jr.

#### MAPS.

- \*Map of Alaska showing contours; scale 1:2,500,000; 1906, by R. U. Goode and E. C. Barnard. In \*Professional Paper 45. \$1. Not issued separately.
- Map of Alaska; scale 1:5,000,000; 1912, by A. H. Brooks. 20 cents.
- Map of Alaska; scale 1:1,500,000; 1915, by A. H. Brooks and R. H. Sargent. 80 cents.
- Map of Alaska showing distribution of mineral deposits; scale 1:5,000,000; by A. H. Brooks. 20 cents. Also included in \*Bulletin 520. 50 cents. (New edition included in Bulletin 642.)
- Index map of Alaska, including list of publications; scale 1:5,000,000; by A. H. Brooks. Free.
- Map of Alaska, scale 1:12,000,000; 1916, by A. H. Brooks. 1 cent.

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- \*The Porcupine placer district, Alaska, by C. W. Wright. Bulletin 236, 1904, 35 pp. 15 cents.
- Economic developments in southeastern Alaska, by F. E. and C. W. Wright. In Bulletin 259, 1905, pp. 47-68.
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- Lode mining in southeastern Alaska, by F. E. and C. W. Wright. In Bulletin 284, 1906, pp. 30-53.
- Nonmetallic deposits of southeastern Alaska, by C. W. Wright. In Bulletin 284, 1906, pp. 54-60.
- \*Lode mining in southeastern Alaska, by C. W. Wright. In Bulletin 314, 1907, pp. 47-72. 30 cents.
- \*Nonmetalliferous mineral resources of southeastern Alaska, by C. W. Wright. In Bulletin 314, 1907, pp. 73-81. 30 cents.



- \*Reconnaissance on the Pacific coast from Yakutat to Alsek River, by Elliot Blackwelder. In Bulletin 314, 1907, pp. 82-88. 30 cents.
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- \*The building stones and materials of southeastern Alaska, by C. W. Wright. In Bulletin 345, 1908, pp. 116-126. 45 cents.
- \*The Ketchikan and Wrangell mining districts, Alaska, by F. E. and C. W. Wright. Bulletin 347, 1908, 210 pp. 60 cents.
- \*The Yakutat Bay region, Alaska: Physiography and glacial geology, by R. S. Tarr; Areal geology, by R. S. Tarr and B. S. Butler. Professional Paper 64, 1909, 186 pp. 50 cents.
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- Mining in southeastern Alaska, by Adolph Knopf. In Bulletin 442, 1910, pp. 133-143.
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- The geology and ore deposits of Copper Mountain and Kasaan Peninsula, Alaska, by C. W. Wright. Professional Paper 87, 1915, 110 pp.
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- Water-power investigations in southeastern Alaska, by G. H. Canfield. In Bulletin 642, 1915, pp. 105-128.
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## TOPOGRAPHIC MAPS.

- \*Juneau gold belt, Alaska; scale, 1:250,000; compiled. In \*Bulletin 287. 75 cents. Not issued separately.
- Juneau special (No. 581A); scale, 1:62,500; by W. J. Peters. 10 cents each, or \$3 for 50.
- Berners Bay special (No. 581B); scale, 1:62,500; by R. B. Oliver. 10 cents each, or \$3 for 50.
- Kasaan Peninsula, Prince of Wales Island (No. 540A); scale, 1:62,500; by D. C. Witherspoon, R. H. Sargent, and J. W. Bagley. 10 cents each, or \$3 for 50.
- Copper Mountain and vicinity, Prince of Wales Island (No. 540B); scale, 1:62,500; by R. H. Sargent. 10 cents each, or \$3 for 50.
- Eagle River Region (No. 581C); scale, 1:62,500; by J. W. Bagley, C. E. Giffin, and R. E. Johnson. In Bulletin 502. Not issued separately.

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- \*The petroleum fields of the Pacific coast of Alaska, with an account of the Bering River coal deposits, by G. C. Martin. Bulletin 250, 1905, 64 pp. 15 cents.
- \*Geology of the central Copper River region, Alaska, by W. C. Mendenhall. Professional Paper 41, 1905, 133 pp. 50 cents.
- \*Geology and mineral resources of Controller Bay region, Alaska, by G. C. Martin. Bulletin 335, 1908, 141 pp. 70 cents.
- \*Notes on copper prospects of Prince William Sound, by F. H. Moffit. In Bulletin 345, 1908, pp. 176-178. 45 cents.
- Mineral resources of the Kotsina-Chitina region, by F. H. Moffit and A. G. Maddren. Bulletin 374, 1909, 103 pp.
- \*Copper mining and prospecting in Prince William Sound, by U. S. Grant and D. F. Higgins, jr. In Bulletin 379, 1909, pp. 87-96. 50 cents.
- \*Gold on Prince William Sound, by U. S. Grant. In Bulletin 379, 1909, p. 97. 50 cents.
- \*Mining in the Kotsina-Chitina, Chistochina, and Valdez Creek regions, by F. H. Moffit. In Bulletin 379, 1909, pp. 153-160. 50 cents.
- Mineral resources of the Nabesna-White River district, by F. H. Moffit and Adolph Knopf; with a section on the quaternary, by S. R. Capps. Bulletin 417, 1910, 64 pp.
- Mining in the Chitina district, by F. H. Moffit. In Bulletin 442, 1910, pp. 158-163.
- Mining and prospecting on Prince William Sound in 1909, by U. S. Grant. In Bulletin 442, 1910, pp. 164-165.
- Reconnaissance of the geology and mineral resources of Prince William Sound, Alaska, by U. S. Grant and D. F. Higgins. Bulletin 443, 1910, 89 pp.
- Geology and mineral resources of the Nizina district, Alaska, by F. H. Moffit and S. R. Capps. Bulletin 448, 1911, 111 pp.
- Headwater regions of Gulkana and Susitna Rivers, Alaska, with accounts of the Valdez Creek and Chistochina placer districts, by F. H. Moffit. Bulletin 498, 1912, 82 pp.
- \*The Chitina district, by F. H. Moffit. In Bulletin 520, 1912, pp. 105-107. 50 cents.
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- Coastal glaciers of Prince William Sound and Kenai Peninsula, Alaska, by U. S. Grant and D. F. Higgins. Bulletin 526, 1913, 75 pp.
- The McKinley Lake district, by Theodore Chapin. In Bulletin 542, 1913, pp. 78-80.
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- Mineral deposits of the Ellamar district, by S. R. Capps and B. L. Johnson. In Bulletin 542, 1913, pp. 86-124.
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- The geology and mineral resources of Kenai Peninsula, by G. C. Martin, B. L. Johnson, and U. S. Grant. Bulletin 587, 1915, 243 pp.
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- A water-power reconnaissance in south-central Alaska, by C. E. Ellsworth and R. W. Davenport. Water-Supply Paper 872, 1915, 173 pp.
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- Retreat of Barry Glacier, Port Wells, Prince William Sound, Alaska, between 1910 and 1914, by B. L. Johnson. In Professional Paper 98, 1916, pp. 35 and 36.
- Mining in the lower Copper River Basin, 1916, by F. H. Moffit. In Bulletin 662, 1917, pp. 155-182.
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- The Kotsina-Kuskulana district, by F. H. Moffit.
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- The Valdez district, Prince William Sound, Alaska, by B. L. Johnson.
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- The Jack Bay district, Prince William Sound, Alaska, by B. L. Johnson.
- The Yakutaga region, by A. G. Maddren.

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- \*Central Copper River region; reconnaissance map; scale, 1:250,000; by T. G. Gerdine. In Professional Paper 41. 50 cents. Not issued separately.
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- Controller Bay region; scale, 1:62,500; by E. G. Hamilton and W. R. Hill. 35 cents. No wholesale rates.
- Chitina quadrangle; reconnaissance map; scale, 1:250,000; by T. G. Gerdine, D. C. Witherspoon, and others. In Bulletin 576.
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- Port Valdez district; scale, 1:62,500; by J. W. Bagley. Price, 20 cents.
- The Bering River coal fields; scale, 1:62,500; by G. C. Martin. Price, 25 cents.
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- \*Geologic reconnaissance in the Matanuska and Talkeetna basins, Alaska, by  
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- Gold lodes and placers of the Willow Creek district, by S. R. Capps. In Bulletin  
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- Auriferous gravels of the Nelchina-Susitna region, by Theodore Chapin. In  
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- \*Matanuska and Talkeetna region, reconnaissance map; scale, 1:250,000; by  
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 vised edition. In Bulletin 534. Not issued separately.
- Mount McKinley region, reconnaissance map; scale, 1:625,000; by D. L. Rea-  
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## REPORT OF THE GOVERNOR OF HAWAII

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# REPORT OF THE GOVERNOR OF HAWAII.

EXECUTIVE CHAMBER,  
*Honolulu, Hawaii, August 31, 1918.*

The SECRETARY OF THE INTERIOR.

SIR: I beg to hand you the following report for the year ended June 30, 1918, which embraces reports of the several Territorial departments, together with statistical information from Federal departments.

## FOOD COMMISSION.

The legislature at its 1917 session passed an act "Creating a commission to increase, conserve, regulate, and control the food supplies of the Territory of Hawaii, and defining its powers and duties and making an appropriation for the purposes thereof."

The chief aim of the food commission was embodied in the cabled appeal of the Secretary of Agriculture, in April, 1917, for Hawaii to make itself as nearly self-supporting as possible.

The aims of the food commission have run parallel to those of the Federal Food Administration.

Considerable work has been done by the commission to stimulate the production of beef, rice, and taro (from which poi, the native food is made).

The following is an estimate of the crop outlook for the coming year. Where bags are mentioned they mean 100 pounds:

Rice planted, 5,549 acres; estimated yield, 235,125 bags.

Bananas planted, 820 acres; no estimate given.

Beans, 959 acres; estimated yield, 11,445 bags.

Irish potatoes, 620 acres; estimated yield, 91,500 bags.

Sweet potatoes, 760 acres; estimated yield, 61,600 bags.

Corn, 9,290 acres; estimated yield, 99,917 tons.

Alfalfa, 463 acres; estimated yield, 5,973 tons.

Cassava, 108 acres; estimated yield, 25,820 bags.

Food savings to the amount of \$2,460,183.95, for the 11 months ended May 31, 1918, was the response of the Territory to the call from the Government for conservation of foodstuffs, which is an increase of savings of \$610,574.75.

## IMPORTS AND EXPORTS OF FOOD STUFFS.

While the value of imports for the year has increased, the quantity has diminished.

Imports for human consumption amounted to \$11,374,778, as against \$10,419,371 for the previous year, an increase of \$955,407. Imports from the mainland of the United States amounted to \$8,373,334, divided as follows: Provisions, meats, and dairy, \$1,771,071;

breadstuffs, \$1,553,583; tobacco, \$1,069,529; spirits, \$868,067; fish, \$588,715; fruits and nuts, \$587,594; rice, \$546,529; vegetables, \$700,021; eggs, \$192,027; sugar, \$125,291; sundries, \$370,907.

Imports from foreign countries totaled \$3,001,444, of which \$2,879,977 was for food supplies and \$121,467 for spirits.

Exports of edibles for human consumption amounted to \$81,115,115, of which \$80,807,523 were sent to the United States, divided as follows: Raw sugar, \$69,089,149; refined sugar, \$2,251,874; pineapples, \$8,199,036; bananas, \$136,048; coffee, \$149,593; rice, \$134,141; sundries, \$847,682.

The foregoing figures are from April 1, 1917, to April 1, 1918, as figures for total exports as of June 30, 1918, are not available. For the year ended June 30, the Territory exported to the United States alone, 540,454 tons of sugar, at a value of \$64,108,540, against 581,302 tons, valued at \$62,741,164, for the previous year.

### LABOR.

Hawaii is entirely an agricultural country, its chief products being sugar and pineapples. Our two principal crops afford steady employment for laborers all the year.

For some years prior to the war our principal source of labor supply was from the Philippines, but owing to lack of transportation it is impossible to get any more laborers from that source. Our National Guard and draft quotas have been principally filled by agricultural laborers with the result that our plantations have been compelled for the time being to abandon the less productive fields. To continue to produce the former yields of food supplies it is absolutely necessary that something be done to induce laborers to come into the Territory.

### NATIONAL GUARD.

Since the last report the National Guard of Hawaii has been taken into the service of the United States Government, and the two regiments are stationed at Fort Shafter and Schofield Barracks.

Efforts are being made with every hope of success to organize a home guard, to be known as the Fifth Infantry.

### GOVERNMENT LANDS.

The leases of many tracts of Government lands have either expired or are about to expire. These lands have been cultivated in sugar cane. As it takes from six to nine months from the time the Government comes into possession of the land before all the details of the homestead law can be complied with and the homesteader put on the land, there was a liability of great loss in the production of sugar unless some extra authority was given the land commissioner and the governor.

In sugar production it is necessary, shortly after the harvesting, to get into the fields and irrigate, cultivate, and fertilize, or else the stools become lost entirely or lose in their sugar content.

During the recent visit of the Secretary of the Interior to the Territory this was fully explained, with the results that a presidential proclamation giving this additional authority to the above-mentioned officials was issued.

Under the provisions of this proclamation a contract has been made with the Waiakea plantation for the cultivation of about 2,000 acres the lease of which expired June 1, 1918.

Under the terms of this contract the plantation is to keep an accurate account of the actual cost of cultivation until the homesteader is put in possession. The homesteader is liable for same, and the plantation is to have a lien on the growing crops until the lien is satisfied.

This one contract means the production of about 10,000 tons of sugar which would otherwise be lost. It is expected that similar contracts will be entered into in connection with other tracts.

As this office is constantly receiving letters from the mainland of the United States asking for information on the subject of homesteading, I feel it is proper that I should explain briefly the method of procedure.

By the act of Congress entitled "An Act to provide a Government for the Territory of Hawaii," when 25 or more persons, who are eligible to take up homesteads apply to the commissioner of public lands to have any certain tract opened for homesteading, the commissioner shall immediately have the lands surveyed, subdivided, appraised, and advertised. The lands must be advertised for at least 60 days. Applications are received through the mail in especially prepared envelopes and put into a box marked with the name of the special tract.

Any citizen of the United States, whether one of the original 25 petitioners or not, may apply for lots in such division.

When the time for receiving applications has closed the box is opened, the applications are thoroughly mixed, and a clerk draws out an envelope, and with a numbering machine stamps the envelope and the application contained therein.

The application is then examined, and if the applicant is found eligible the name is entered in a book and this person has first choice of the lots in the subdivision. The drawing continues until all of the applications have been numbered.

Those who are successful in drawing lots must pay down 10 per cent, 15 per cent at the end of the first year, and 15 per cent each succeeding year. Deferred payments bear interest at the rate of 6 per cent per annum.

From the foregoing it can be seen that cases are possible in which none of the original petitioners secure lots in the drawing.

### GREATER HONOLULU HARBOR.

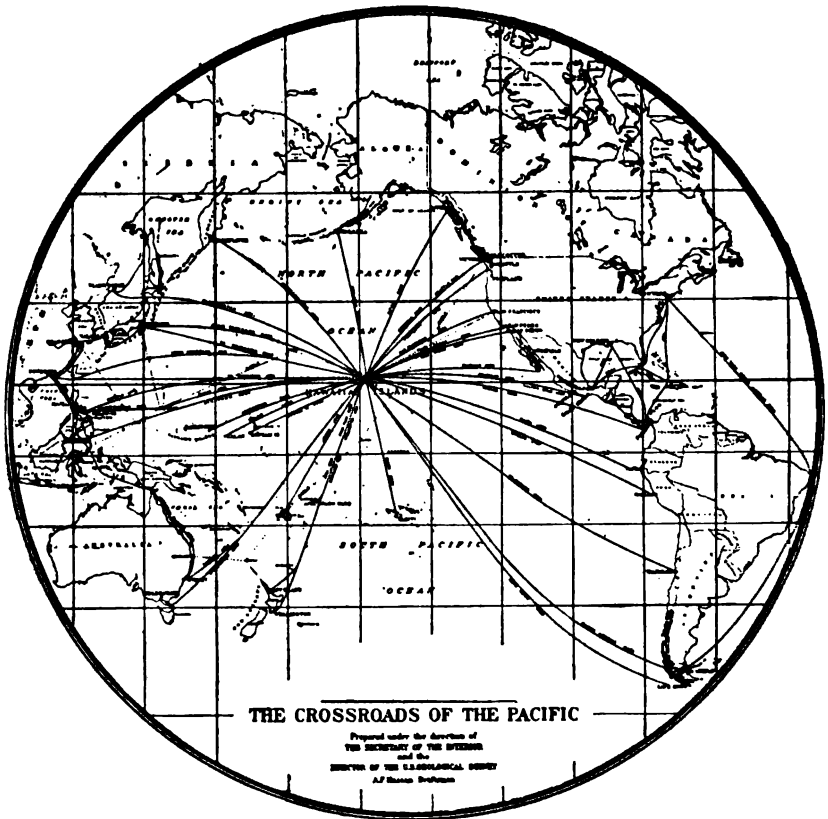
The Territorial government and private interests have done much to improve and extend the facilities of Honolulu Harbor, and if we did not expect a great expansion after the war, these improvements would be considered sufficient for many years to come.

A large part of the American ships now being built will be used after the war in commerce on the Pacific Ocean, and as Honolulu

occupies a position as the hub of Pacific Ocean routes, it is bound to be a port of call for all these vessels for fuel and supplies.

To care for these ships properly it is deemed necessary for the Territory to acquire at as early a date as possible, the harbor side of Sand Island, the title to which is at present vested in the Federal Government.

It is also necessary that Congress should provide funds for the first unit of enlarging Honolulu Harbor by dredging in the general



Map showing Hawaii as the intersection of steamer routes crossing the Pacific Ocean.

direction of Kalihi. If this first unit were completed it would nearly double the size of the present harbor.

This project has been approved by each United States local engineer and has been indorsed by the Board of Engineers for Rivers and Harbors at Washington.

### HAWAII AND THE WAR.

In man power and money power Hawaii has responded generously to the call of war. Her women are doing a noble work in the conservation of foodstuffs and for the Red Cross.

For the first liberty loan the Territory was called upon to furnish \$2,000,000, and 1,100 subscribers responded with \$2,350,000. In the second loan campaign \$3,000,000 was the quota set, and the response was \$8,060,000 from 19,150 subscribers. Of these subscribers 9,879 were Regular Army men stationed in the Territory. The allotment for the third loan was \$3,614,000, and the response was \$4,809,000 from 15,115 subscribers.

### ELECTIONS.

The Territorial elections are held in November of each even year, and the only officers who are elected are one-half of the members of the senate, for four years, and all of the members of the house of representatives, for two years. The county and city and county elective officers are the mayor of the city and county of Honolulu and the supervisors, attorney, clerk, treasurer, auditor, and sheriff of each county and city and county.

In the city and county of Honolulu and in the county of Maui the supervisors are elected at large, while in Kauai they are elected from the five districts making up that county. Since 1913 the county of Hawaii has had a system of electing three supervisors from each half of the island, and one, the chairman of the board, from the island at large.

In 1913 a direct primary law was enacted by the legislature. Provision was also made whereby the counties of Hawaii, Kauai, and Maui could hold elections separately from the Territorial elections, namely, in May of each odd year. Under this law elections were held in these counties in May, 1915. In 1915 a law was passed which provided that all general elections of officers of the city and county of Honolulu after 1915 should be in May, 1917, and biennially thereafter. The 1917 legislature enacted amendments so that general elections of the counties and city and county of Honolulu would be held in June, 1917, and biennially thereafter.

Statistics covering the last general election held in November, 1916, are as follows:

*Registered voters, by races, at each general election.*

	Population 1910.		Registered voters.										Gain 1916 compared with 1914.
	Total.	Male citizens of voting age.	1900	1902	1904	1906	1908	1910	1912	1914	1916		
Hawaiian .....	38,547	9,802	.....	8,680	9,260	9,635	8,967	9,619	9,435	10,308	10,763	455	
Portuguese .....	22,303	2,025	.....	594	728	939	1,230	1,530	1,769	2,317	2,610	293	
Chinese .....	21,674	670	.....	143	175	220	272	306	486	654	777	123	
Japanese .....	79,674	53	.....	3	2	.....	6	13	48	112	179	67	
American .....	29,711	5,783	{	1,932	1,872	1,674	1,715	1,763	2,365	3,020	3,284	264	
British .....				546	542	563	567	554	544	629	648	19	
German .....				309	301	301	322	333	299	629	648	19	
Others .....				405	373	246	195	234	239	659	720	61	
Total .....	191,909	18,333	11,216	12,612	13,253	13,578	13,274	14,442	15,185	17,699	18,961	1,282	
Increase .....				1,396	641	325	304	1,168	743	2,514	1,282	.....	



*Registered voters, by races, at each general election—Continued.*

## RECAPITULATION.

	Population 1910.		Registered voters.									Gain 1910 compared with 1914.
	Total.	Male citizens of voting age.	1900	1902	1904	1906	1908	1910	1912	1914	1916	
Hawaiian.....				8,680	9,260	9,635	8,967	9,619	9,435	10,308	10,763	455
Anglo-Saxon and Latin.....				3,786	3,816	3,723	4,029	4,414	5,216	6,625	7,262	637
Oriental.....				146	177	220	278	406	534	766	956	190
Total.....			11,216	12,612	13,253	13,578	12,274	14,442	15,185	17,699	18,981	1,282
Increase or decrease:												
Hawaiian.....					+580	+375	-668	+652	-184	+873	+455	.....
Anglo-Saxon and Latin.....					± 30	- 93	+306	+385	+802	+1,409	+637	.....
Oriental.....					+ 31	+ 43	+ 58	+ 131	+126	+232	+ 190	.....
Total.....					+641	+325	-304	+1,168	+743	+2,514	+1,282	.....

*Votes cast for Delegate to Congress at each general election.*

Parties.	1900	1902	1904	1906	1908	1910	1912	1914	1916
Republican.....	3,856	6,628	6,833	7,364	5,698	8,049	7,023	8,590	7,702
Democratic.....	1,650	.....	2,868	2,884	3,824	4,503	5,770	2,609	5,637
Home Rule.....	4,083	4,698	2,289	2,182	2,794	989	346	.....	.....
Socialist.....	.....	.....	.....	.....	.....	.....	201	.....	.....
Progressive.....	.....	.....	.....	.....	.....	.....	.....	610	.....
Total.....	9,589	11,326	11,990	12,430	12,316	13,541	13,340	11,809	13,339
Votes not cast or not counted.	1,627	1,286	1,263	1,148	958	901	1,845	5,890	5,642

*Senators and Representatives, by parties and races, in each legislature.*

Biennial session.	Party.			Race.		
	Republican.	Democratic.	Home Rule.	Hawaiian.	Portuguese.	Other whites.
<b>Senators:</b>						
1901.....	6	.....	9	10	.....	5
1903.....	10	1	4	9	.....	6
1905.....	14	1	.....	7	.....	8
1907.....	12	2	1	8	.....	7
1909.....	9	4	2	8	.....	7
1911.....	12	1	2	8	.....	7
1913.....	18	5	2	16	.....	19
1915.....	8	7	.....	7	.....	8
1917.....	12	3	.....	8	1	6
<b>Representatives:</b>						
1901.....	9	4	17	23	.....	7
1903.....	20	.....	10	23	.....	7
1905.....	26	1	1	21	.....	9
1907.....	24	6	.....	24	2	4
1909.....	22	7	1	21	.....	4
1911.....	26	.....	2	20	3	7
1913.....	18	11	1	26	2	7
1915.....	29	.....	.....	19	4	8
1917.....	24	6	.....	20	5	8

<sup>1</sup> At the beginning of the session 1913 there were 9 Republican, 4 Democratic, 2 Home Rule, 5 Hawaiian, and 10 white senators, but during the session 1 white Republican senator died and a Hawaiian Democrat was elected in his place at a special election.

Section 55 of "An act to provide a government for the Territory of Hawaii," approved April 30, 1900 (31 Stat., 141), as amended by an act of Congress approved May 27, 1910 (36 Stat., 4431), provides that—

The legislature at its first regular session after the census enumeration shall be ascertained, and from time to time thereafter, shall reapportion the membership in the senate and house of representatives among the senatorial and representative districts on the basis of the population in each of said districts who are citizens of the Territory.

This provision is mandatory, yet the legislature has refused to act, although bills to that effect have been introduced at nearly every session.

#### *Apportionment.*

Senators:		Representatives—Continued.	
First district .....	4	Second district.....	4
Second district.....	3	Third district.....	6
Third district.....	6	Fourth district.....	6
Fourth district.....	2	Fifth district.....	6
Representatives:		Sixth district.....	4
First district .....	4		

### LEGISLATURE.

Owing to a severe storm, the greatest in the history of the Territory, it became necessary for the governor to call the legislature together in special session to provide appropriations to rebuild the bridges and approaches thereto in the district of Kohala, Island of Hawaii.

The session opened on May 14, 1918, and completed its labors on May 31.

During the session, in addition to passing the legislation for which it was especially called, the legislature acted upon several other projects very vital to the welfare of the Territory, among which might be mentioned the following:

Act 6: Permitting one political subdivision of the Territory to contract to do work for another subdivision or for the Federal Government at actual cost.

Act 13: Authorizing the food commission to increase, regulate, and control the food supplies of the Territory of Hawaii.

Act. 14: To provide for the draining and filling of certain lands at Waikiki, Honolulu.

Act 16: To provide for a municipal market for the city of Honolulu.

Act 18: Creating a commission to investigate feeble-mindedness in the Territory of Hawaii.

Act 19: Defining disloyalty and providing punishment therefor.

Act 24: To provide for an adequate food supply for the inhabitants of the Territory of Hawaii, for the purpose of which the sum of \$200,000 is placed in a revolving fund to be at the disposal of the governor.

Act 25: Creating a Territorial market commission, which is to bring the producer and consumer more closely together.

Act 26: Providing a contingent fund of \$100,000.

One of the problems which has been bothering the people of the Territory for a long time past is how to make the best use of public lands whose leases either have expired or are about to expire. This question was considered at the session but nothing practical was accomplished regarding it.

*Work of legislatures.*

Year.	Days in session.	Cost of session. <sup>1</sup>	Cost per day.	Cost per bill passed.	Bills introduced.	Bills passed.	Bills vetoed. <sup>2</sup>	Vetoed sustained.
1901.....	116	\$94,654.94	\$816.00	\$3,506.73	342	27	3	2
1902 *.....	12	4,028.70						
1903.....	120	90,943.94	757.86	837.96	415	106	8	7
1904 *.....	12	11,079.68			24	14	1	1
1905.....	103	62,590.06	606.57	563.80	387	111	22	14
1907.....	60	57,258.35	954.31	406.08	361	141	26	14
1909.....	60	58,225.02	970.42	383.06	388	152	8	7
1909 *.....	5	11,636.61			7	2		2
1911.....	60	70,245.84	1,170.75	415.66	410	169	5	6
1913.....	60	83,495.75	1,391.59	491.15	466	170	6	3
1915.....	60	71,478.67	1,191.31	316.23	498	226	3	3
1917.....	60	84,087.23	1,401.45	348.91	607	241	3	3
1918 *.....	15	16,367.23	1,091.15	584.54	64	28	1	0

<sup>1</sup> Part of the expenses of the last five regular sessions were paid out of the Federal appropriations, as follows: 1907, \$27,349.04; 1909, \$29,939.26; 1911, \$28,938.38; 1913, \$30,000; 1915, \$30,000; 1917, \$27,409.14.

<sup>2</sup> The vetoes in the table do not include vetoes of items in appropriation bills or pocket vetoes. The record as to items in appropriations bills is as follows: In 1903, 48 vetoes, all sustained; in 1905, 42 vetoes, 35 sustained; in 1907, 13 vetoes, 3 sustained; in 1909, 10 vetoes, 8 sustained; in 1911, 3 vetoes, 1 sustained; in 1913, 3 vetoes, all sustained; in 1915, none; in 1917, 1 veto, overridden. The record as to pocket vetoes is as follows: In 1904, 12; in 1907, 13; in 1909, 17; in 1911, 6; in 1913, 9; in 1915, 4; in 1917, 10.

\* Special session of the senate.

\* Special session of the legislature.

**COUNTY AND CITY AND COUNTY GOVERNMENTS.**

Local governments in Hawaii were first established on July 1, 1905, the Territory being divided into four counties. On January 1, 1909, the county comprising the Island of Oahu was converted into a city and county, known as the City and County of Honolulu, with a mayor. The leper settlement on the Island of Molokai forms a fifth county, controlled by the Territorial board of health.

Following is given the income of the various counties for the fiscal year ended June 30, 1918, showing an increase of \$431,136.43 over the previous fiscal period:

*Income of counties, fiscal year ended June 30, 1918.*

Counties.	Collected by Territory for counties.		Collected by counties.				Total.
	General taxes.	Road tax.	License fees.	Fines and costs.	Water and sewer rates.	Miscellaneous.	
Honolulu (Oahu).....	\$1,300,898.69	\$160,259.43	\$137,366.03	\$51,517.47	\$242,701.62	\$216,093.91	\$2,108,837.15
Hawaii.....	647,087.06	68,436.08	74,065.90	35,570.87	18,728.01	30,342.13	874,229.87
Maua.....	402,941.61	47,960.96	30,683.95	19,188.15	19,229.12	20,701.68	540,075.47
Kauai.....	263,039.20	35,633.00	22,987.24	12,626.22	5,956.74	8,944.28	349,086.66
Total, 1918.....	2,613,966.56	312,289.47	265,013.12	118,902.51	286,615.49	275,452.00	3,872,239.17
Total, 1917.....	2,049,325.89	256,757.71	280,008.91	88,828.01	288,441.45	247,740.77	3,441,102.74
Increase.....	564,640.69	55,531.76		20,074.50			431,136.43
Decrease.....			14,995.79		1,826.96	202,288.77	

<sup>1</sup> Includes \$133,518.03 of improvement assessments.

<sup>2</sup> Includes \$344,780.23 from sale of bonds and improvement assessments

**FINANCES.****BONDED INDEBTEDNESS.**

By the provisions of section 55 (31 Stat., 141), as amended by Statutes 36, page 443, the Territory is permitted to issue bonds not to exceed 7 per cent on the total assessed value of property in the Territory, but not more than 1 per cent in any one year.

The last completed assessment amounts to \$235,650,967, therefore the borrowing limit is \$16,495,567.69.

The outstanding bond issue at present amounts to \$8,749,000.

The legislature at its 1917 session provided for a bond issue of approximately \$2,500,000, of which there has been issued \$1,500,000.

*Territorial bonded indebtedness June 30, 1918.*

Date of issue.	Term in years.	Interest.	Sale price.	Percentage basis.	Aggregate outstanding.	Date due.	Where sold.
		<i>Per cent.</i>					
Oct. 4, 1905.....	5-15	4	101.375	3.70	\$270,000	Oct. 4, 1920	Honolulu.
Jan. 2, 1906.....	5-15	3 $\frac{1}{2}$	98.125	3.66	750,000	Jan. 2, 1921	New York.
Oct. 1, 1907.....	5-15	3 $\frac{1}{2}$	98.150	3.66	294,000	Oct. 1, 1922	Honolulu.
Oct. 1, 1909.....	5-15	3 $\frac{1}{2}$	98.250	3.65	200,000	Oct. 1, 1924	Do.
Aug. 1, 1911.....	20-30	4	101.5875	3.88	1,500,000	Aug. 1, 1941	New York.
Sept. 3, 1912.....	20-30	4	100.5887	3.985	1,500,000	Sept. 3, 1942	Do.
Sept. 15, 1914.....	20-30	4	100.01	4.00	1,430,000	Sept. 15, 1944	New York and Honolulu.
May 15, 1916.....	20-30	4	100.00	4.00	1,750,000	May 15, 1946	Do.
Aug. 1, 1917 <sup>1</sup> .....	20-30	4	98.04	4.08	1,055,000	Aug. 1, 1947	Do.
Outstanding indebtedness June 30, 1918.....					8,749,000		

<sup>1</sup> Total issue was \$1,500,000 and up to June 30, 1918, \$1,055,000 was sold.

**RECEIPTS AND DISBURSEMENTS.**

The greater part of the county revenues are collected by the Territory and turned over to the various counties, while, in turn, the Territory receives back from them the cost of assessing and collecting taxes and the interest and sinking fund on bonds issued by the Territory for the benefit of the counties.

*Cash on hand and floating indebtedness, general account, at end of each fiscal year since organization of Territorial Government.*

Fiscal years.	Cash on hand.	Outstanding warrants.	Net floating indebtedness.	Net cash available for ensuing year.
1901.....	\$75,994.97	\$176,495.45	\$100,500.48	.....
1902.....	287,131.30	297,427.87	10,296.57	.....
1903.....	73,161.63	240,713.42	167,551.79	.....
1904.....	56,613.29	709,014.31	652,401.02	.....
1905.....	50,408.49	603,426.80	544,018.40	.....
1906.....	335,331.37	72,227.96		\$263,103.41
1907.....	348,216.51	34,740.49		313,476.02
1908.....	391,737.19	225,891.71		165,845.48
1909.....	134,759.21	170,718.67	35,959.46	.....
1910.....	845,218.51	146,247.55		698,970.96
1911.....	822,282.07	161,977.58		660,304.49
1912.....	690,550.70	69,141.66		621,409.04
1913.....	716,729.60	56,008.61		660,720.99
1914.....	366,001.24	43,955.84		322,045.40
1915.....	464,040.43	49,162.62		414,877.81
1916.....	539,388.71	51,306.23		488,082.48
1917.....	889,508.42	95,102.12		794,406.30
1918.....	711,617.21	150,106.63		561,410.58

*Treasury cash balances, all accounts, at end of fiscal years 1914, 1915, 1916, 1917, and 1918.*

	1914	1915	1916	1917	1918
<b>Current revenues:</b>					
General.....	\$366,001.24	\$464,040.43	\$539,388.71	\$889,508.42	\$711,517.21
Immigration and conserva- tion.....	284,812.18	12,810.17	29.22	103,217.96	105,141.17
Immigration.....			101,189.27	134,852.01	210,985.93
Sanitation fund.....	217,539.31	206,048.33	151,967.43		
Honolulu water and sewer works.....	148.10				
School fund.....	66,628.70	82,653.79	94,573.24	85,338.37	158,980.91
Sinking fund.....	107,431.45	45,192.74	55,217.54	78,410.95	76,729.04
Special land sales.....	96,144.47	126,373.05	157,185.59	136,261.17	215,260.19
Miscellaneous special funds..	37,974.12	71,338.10	91,825.99	84,189.97	125,589.81
<b>Total.....</b>	<b>1,176,749.57</b>	<b>1,008,456.61</b>	<b>1,191,377.00</b>	<b>1,511,308.87</b>	<b>1,604,134.26</b>
Loan fund.....	109,566.00	1,128,455.89	998,653.48	566,330.42	1,043,462.95
<b>Grand total.....</b>	<b>1,286,315.57</b>	<b>2,136,912.50</b>	<b>2,190,030.48</b>	<b>2,077,639.29</b>	<b>2,647,597.21</b>

*Receipts and disbursements, general account, fiscal year ended June 30, 1918.*

#### RECEIPTS.

##### Taxes:

Real property.....	\$1,967,550.23
Personal property.....	1,510,659.70
Interest and penalties.....	12,181.75
Specific property (autos, carriages, etc.).....	205,901.57
Income, general.....	794,427.22
Income, special.....	343,121.14
Personal, (poll, school, road).....	279,215.07
	<b>\$5,113,056.68</b>

Insurance.....	48,718.70
Inheritance.....	76,678.75
Documentary stamps.....	1,325.00
Land sales.....	271,475.01
Land revenue (rents, etc.).....	295,956.78
Harbor, wharf, and pilot revenues.....	139,295.16
Recording fees.....	23,464.00
Fines and costs.....	508.44
Support of United States prisoners.....	6,767.45
Interest on bank deposits (exclusive of loan).....	21,611.81
Miscellaneous.....	237,153.54

<b>Total receipts.....</b>	<b>6,236,009.32</b>
Transferred from special funds.....	\$612,824.29
Paid by counties.....	359,214.12
	<b>972,038.41</b>
	<b>7,208,047.73</b>
Cash balance July 1, 1917.....	889,508.42
	<b>8,097,556.15</b>

## DISBURSEMENTS.

Legislature .....	\$17,742.98	
Elections .....	1,208.17	
Incidentals, governor's office .....	441.48	
Governor's and secretary's office .....	11,297.90	
Library of Hawaii .....	17,795.97	
Archives bureau .....	5,784.89	
National Guard and Naval Militia .....	101,852.03	
Expenses, congressional visitors .....	27,417.40	
Expenses, food commission .....	16,099.75	
Promotion .....	6,000.00	
Pensions .....	13,158.33	
Auditing department .....	14,226.50	
Treasury department .....	22,030.01	
Tax bureau .....	94,111.53	
College of Hawaii .....	33,956.37	
Public works department .....	94,338.04	
Harbor commission .....	168,761.22	
Public lands department .....	68,873.13	
Survey department .....	28,782.96	
Expenses land board .....	1,110.83	
Public health department .....	535,300.08	
Judiciary department .....	16,181.56	
Attorney general's department .....	16,791.63	
Prison .....	104,867.60	
Record bureau .....	24,834.53	
Hilo public library .....	3,562.36	
Improvements, Kauai farm and sanitarium .....	9,498.69	
Hawaiian dictionary .....	2,510.00	
Industrial accident boards .....	5,592.98	
Agriculture and forestry .....	128,983.37	
Immigration .....	6,719.20	
Relief, T. F. farm .....	13,818.25	
Decisions United States district court .....	143.72	
Miscellaneous .....	1,216.50	
Establishment and maintenance school for defective children .....	4,725.95	
Water investigation .....	18,091.04	
Industrial schools .....	87,683.01	
Expenses entertainment .....	4,573.68	
Employing temporary substitutes .....	2,188.95	
Expenses Waikiki lands commission .....	56.75	
Protection government property .....	86,925.15	
Advance to school fund for pay of teachers .....	50,000.00	
Reimbursing city and county of Honolulu for street improvements .....	26,980.65	
Funeral expenses Queen Liliuokalani .....	8,526.18	
		\$1,854,259.22
Interest on public debt .....		819,800.09

## Transferred to special accounts:

Sinking fund .....	\$178,318.09	
Land purchases .....	187,706.05	
Homestead roads .....	76,089.81	
Surveying and opening homesteads .....	5,000.00	
Registering land assurance .....	1,345.79	
Industrial schools .....	3,424.38	
College of Hawaii .....	5,130.89	
Sanitation fund .....	103,748.52	
School fund .....	1,478,218.08	
Public utilities fund .....	13,114.48	
Armory boards .....	397.75	
Kalaupapa store revolving fund .....	36,254.58	
Marketing division revolving fund .....	58,269.37	
Insurance fund .....	21,998.79	
Homesteads' improvements .....	8,008.82	
Teachers' pension fund .....	7,335.19	
Immigration fund .....	101,923.19	
Lahainaluna School .....	2,297.73	
Forest reserve fund .....	348.50	
Kaupakalua land sales .....	1,370.62	
Roads, Waiakea, Hilo .....	2,307.80	
Ponah..wai lots roads .....	2,794.00	
Mechanical, live stock, and horticultural fairs .....	48,972.80	
Sanitorium, insane asylum .....	1,065.65	
Relief of George A. McEldowney .....	178.21	
		<u>\$2,340,619.09</u>

## Paid to counties:

City and county of Honolulu .....	1,461,158.12	
County of Hawaii .....	715,523.16	
County of Maui .....	450,902.57	
County of Kauai .....	298,672.20	
		<u>2,926,256.05</u>

Outstanding warrants June 30, 1917 .....

7,441,043.45  
85,102.12

Current cash balance .....

711,517.21

Outstanding warrants June 30, 1918 .....

150,106.63  
561,410.58

8,097,556.15

## SPECIAL FUNDS.

Statement of all special funds for fiscal year ended June 30, 1918.

Funds.	Net cash, July 1, 1917.	Receipts.		Total available.
		Receipts.	Transfers from other accounts.	
School.....	\$61,268.48	\$1,053,218.08	\$475,000.00	\$1,589,516.56
Sanitation.....	124,351.23	3,743.52	100,000.00	238,099.75
Sinking.....	78,410.95	178,318.09		256,729.04
Surveying and opening homesteads.....	18.80	6,000.00		5,018.80
Homestead roads:				
Oahu.....	5,265.42	7,949.42	35.10	13,249.94
Hawaii.....	56,503.78	37,681.74		93,185.52
Maul.....	4,991.65	3,695.22	1,101.68	9,788.55
Kauai.....	4,460.94	14,318.61	3,354.10	18,133.65
Kauai.....	1,320.92	2,033.18		3,354.10
Kaneohe.....	1,978.05			978.05
Kaimu.....	1,598.47			1,598.47
Kula.....	1,615.82	375.86		1,991.68
Piholo.....	1,218.29			1,218.29
Puukapu.....	9,000.00			9,000.00
Residence tract roads:				
Kawailoa.....	3,892.31			3,892.31
Kuliouou.....	6,881.61	1,453.00		8,334.61
Olaa.....	1,612.92	461.32		2,074.24
Auwaiohima.....	2,584.01	2,881.75		5,465.76
Makiki round top.....	10,948.19	3,667.35		14,615.54
Waioli.....	862.83			862.83
Kaneohe.....	2,981.00			2,981.00
Waioli-Keeke.....	.53	1,572.36		1,572.89
Land purchases:				
Oahu.....	8,384.65	168,834.05		167,218.70
Hawaii.....	8,934.10	28,872.00		37,806.10
Maul.....	1,044.00			1,044.00
College of Hawaii.....	8.71	4,780.89		4,789.60
Lahaina Luna school.....	16,527.12	2,297.73		18,824.85
Road, Napoopoo, South Kona.....			6,000.00	6,000.00
College of Hawaii scholarship account.....		350.00		350.00
Girls' industrial school.....	174.33	794.06		968.39
Boys' industrial school.....	17.78	2,630.32		2,648.10
Forestry preservation.....	3,695.25	348.50		4,043.75
Marketing bureau.....	571.83			571.83
Land registration assurance.....	6,612.82	1,345.79		7,958.61
Homesteaders' improvements.....	340.00	3,008.82		3,348.82
Kaupapa land sales.....		1,370.62		1,370.62
Public utilities commission.....	6,991.48	12,114.48		20,105.96
Armory boards.....	414.44	397.75		812.19
Kalaupapa store.....	71.44	36,254.58		36,326.02
Marketing division revolving fund.....	9,900.75	58,269.37		68,170.12
Territorial insurance fund.....	23,067.34	21,998.79		45,066.13
Immigration fund.....	108,217.98	1,923.19	100,000.00	209,141.17
Teachers' pension fund.....	10,894.93	7,335.19		18,230.12
Roads, Waiakoa, Hilo.....	341.02	2,807.80		2,648.82
Filling lands and proposed roadway, Pono- hawai, Hilo.....	5,000.00			5,000.00
Sanitarium, Insane Asylum.....		1,065.65		1,065.65
Ponohawalua lots.....		2,794.00		2,794.00
Mechanical, live stock, and horticultural fair.....		42,972.80	6,000.00	48,972.80
Relief, Geo. A. McEldowney.....		178.21		178.21
Total special funds.....	691,973.97	1,709,619.09	691,490.88	2,993,083.94
Loan fund.....	552,430.08	1,082,550.80		1,604,980.88
General fund.....	794,406.30	6,595,223.44	612,824.29	8,002,454.08
Total, all funds.....	1,938,810.33	9,367,393.33	1,304,315.17	12,600,518.83



Statement of all special funds for fiscal year ended June 30, 1918—Continued.

Fund.	Expenditures.		Total expenditures.	Net cash, June 30, 1918.
	Expenditures.	Transfers to general and other special accounts.		
School.....	\$995,136.95	\$475,000.00	\$1,470,136.95	\$119,379.61
Sanitation.....	27,192.07		27,192.07	210,907.68
Staking.....	180,000.00		180,000.00	76,729.04
Surveying and opening homesteads.....	2,720.36		2,720.36	2,296.24
Homestead roads:				
Oahu.....		13,022.29	13,022.29	227.65
Hawaii.....	1,072.40		1,072.40	92,113.12
Maui.....		9,468.00	9,468.00	320.55
Kauai.....		10,800.00	10,800.00	7,333.65
Kauai.....		3,354.10	3,354.10	
Kaneohe.....				978.06
Kaimu.....				1,586.47
Kula.....		1,991.68	1,991.68	
Pihiolo.....	41.24	10.00	51.24	1,167.05
Puukapu.....	8,542.06		8,542.06	457.95
Residence tract roads:				
Kawailoa.....				3,892.31
Kuliouou.....		35.10	35.10	8,299.51
Olaa.....	1,791.10		1,791.10	233.14
Auwalolimu.....	1,075.50		1,075.50	4,390.28
Makiki round top.....	8,539.55		8,539.55	6,075.99
Waloli.....				892.83
Kaneohe.....				2,981.00
Walohuli-Keokea.....	4.50	1,400.00	1,404.50	168.39
Land purchases:				
Oahu.....	121,465.65		121,465.65	45,753.05
Hawaii.....		6,000.00	6,000.00	31,806.10
Maui.....				1,044.00
College of Hawaii.....	4,646.72		4,646.72	142.88
Lahaina luna school.....	10,469.92		10,469.92	8,354.93
Road, Napoopoo, South Kona.....	2,714.25		2,714.25	3,285.75
College of Hawaii scholarship account.....	300.00		300.00	60.00
Girls' industrial school.....	926.27		926.27	42.12
Boys' industrial school.....	2,127.17		2,127.17	530.99
Forestry preservation.....	19.46		19.46	4,094.29
Marketing bureau.....				571.83
Land registration assurance.....				7,958.61
Homesteaders' improvements.....	2,147.82		2,147.82	1,261.00
Kaupakalua land sales.....	201.00		201.00	1,169.69
Public utilities commission.....	12,196.23		12,196.23	7,969.79
Armory boards.....	633.95		633.95	178.21
Kalaupapa store.....	36,323.90		36,323.90	2.12
Marketing division revolving fund.....	63,436.44		63,436.44	4,733.63
Territorial insurance fund.....	22,633.73		22,633.73	22,422.40
Immigration fund.....		100,000.00	100,000.00	105,141.17
Teachers' pension fund.....	2,200.60		2,200.60	16,019.52
Roads, Waialeale, Hilo.....		2,234.00	2,234.00	414.82
Filling lands and proposed roadway, Pono-hawai, Hilo.....				5,000.00
Sanitarium, insane asylum.....				1,065.65
Ponohawai lots.....				2,794.00
Mechanical, live stock, and horticultural fair.....	44,271.30		44,271.30	4,701.50
Relief, Geo. A. McEldowney.....	178.21		178.21	
Total, special funds.....	1,553,008.34	623,315.17	2,176,323.51	816,760.43
Loan fund.....	585,618.52		585,618.52	1,019,362.34
General fund.....	5,100,424.36	2,340,619.09	7,441,043.45	561,410.58
Total, all funds.....	7,239,051.22	2,963,934.26	10,202,985.48	2,397,533.35

## TAXES.

Since 1901 the Territory has had in successful operation an income tax of 2 per cent on personal incomes of more than \$1,500, and since 1909 an additional tax on all incomes over \$4,000. This latter act was for only a two-year period but has been reenacted by each succeeding legislature. These taxes go to the Territorial government.

The county governments are supported by the property tax, the rates varying in the several counties. Up to 1917 the counties were

allowed two-thirds of 1 per cent for their general expenses and public improvements. The legislature then amended the law to allow them a full 1 per cent. The balance of the tax rate above this 1 per cent is for the purpose of raising money for interest and sinking fund on bonds, pay of school teachers and maintenance of schools, etc.

The bulk of this property tax is paid by corporations, and the method of assessment of these companies, known as "enterprise for profit basis," is somewhat unique. The law provides "that in all cases where real and personal property, or several kinds or parcels of real or personal property, respectively, are combined and made the basis of an enterprise for profit the enterprise for profit shall be assessed as a whole on its fair and reasonable aggregate value. In estimating the aggregate value of each such enterprise for profit there shall be taken into consideration the net profits made by the same, also the gross receipts and actual running expenses; and where it is a company being a corporation whose stock is quoted in the market the market price thereof, as well as all other facts and considerations which reasonably and fairly bear upon such valuation."

This law has been adjudicated by the Territorial supreme court many times, so that our assessors in making their assessments are guided by the act as thus interpreted.

In making these assessments it is usual to capitalize the profits of four years at different rates per cent according to the conditions affecting the particular enterprise. For instance, if a plantation owns its land in fee simple, the soil being fertile and having abundant water supply, the rate of capitalization is a low one. The rate is increased as the conditions appear less nearly perfect. Where the profits are large the enterprise can well afford to pay the larger tax, as when the profits are smaller the assessed value is automatically reduced. In 1913 the sugar profits were unusually small, which accounts for the falling off of the total assessment in the Territory in 1914.

The inheritance and insurance taxes go to the Territory for general purposes. The inheritance tax rates on direct inheritances in excess of \$5,000 by persons other than aliens and nonresidents of the United States are as follows:

	Per cent.
On amounts between \$5,000 and \$20,000.....	1½
On amounts between \$20,000 and \$50,000.....	2
On amounts between \$50,000 and \$100,000.....	2½
On amounts between \$100,000 and \$250,000.....	3
On amounts over \$250,000.....	3½

And those on collateral inheritances in excess of \$500 by persons other than aliens and nonresidents of the United States are as follows:

	Per cent.
On amounts between \$500 and \$5,000.....	3
On amounts between \$5,000 and \$20,000.....	5
On amounts between \$20,000 and \$50,000.....	5½
On amounts between \$50,000 and \$100,000.....	6
On amounts over \$100,000.....	6½

The rate of inheritances by aliens or nonresidents of the United States in excess of \$500 is 10 per cent.

*Tax rates.*

Year.	First division, city and county of Honolulu.	Second division, counties of Maui and Molokai.	Third division, county of Hawaii.	Fourth division, county of Kauai.
1912.....	1.10	1.15	1.18	1.16
1913.....	1.11½	1.10	1.23	1.16
1914.....	1.17	1.29	1.38	1.26
1915.....	1.26½	1.44	1.52½	1.38½
1916.....	1.27½	1.332	1.42	1.41½
1917.....	1.21	1.26	1.30	1.35
1918.....	1.83	1.60	1.865	1.81

*Sources and distribution of all revenues of the Territory and the counties, fiscal year ended June 30, 1918.*

Distribution.	Collected by the Territory.						
	General property taxes.	Specific property taxes.	Income taxes.	Personal taxes.	Inheri- tance taxes.	Insur- ance taxes.	Miscella- neous revenues.
Territory—General fund...	\$47,014.95		\$1,137,548.36		\$76,676.75	\$48,718.70	\$997,557.19
Territory, as agent for counties:							
Assessing and collect- ing taxes.....	99,390.00						
Interest and sinking fund.....	149,456.54						
Schools:							
General support under Territory.....	891,490.54			\$110,746.78			
Buildings and grounds under counties.....	280,937.50						
Counties:							
General fund.....	2,022,102.15	\$6,305.23		55,775.16			
Roads.....		199,596.34		112,693.13			
Total.....	3,490,391.68	205,901.57	1,137,548.36	279,215.07	76,676.75	48,718.70	997,557.19

Distribution.	Collected by the counties.					Total.
	License fees.	Fines and costs.	Water and sewer rates.	Miscella- neous revenues.	Sale of bonds and improve- ment as- sessment.	
Territory—General fund.....						\$2,307,515.96
Territory as agent for counties:						
Assessing and collecting taxes.....						99,390.00
Interest and sinking fund.....						149,456.54
Schools:						
General support under Terri- tory.....						1,002,237.32
Buildings and grounds under counties.....						280,937.50
Counties:						
General fund.....	\$265,013.12	\$118,902.51	\$286,615.49	\$275,452.00	\$133,518.03	3,163,683.69
Roads.....						312,289.47
Total.....	265,013.12	118,902.51	286,615.49	275,452.00	133,518.03	7,315,510.47

*Taxes collected for the year ended June 30, 1918, by races, etc., of taxpayers, inclusive of interest, penalties, and costs.*

Kind of taxes, etc.	Anglo-Saxons.	Hawaiians.	Portuguese and Spanish.	Chinese.	Japanese.	Total.
<b>Real property:</b>						
Corporations, firms, etc.....	\$1, 217, 273.56	\$62,302.36	\$2,566.02	\$170,770.85	\$3,638.68	\$1,301,551.47
Other than corporations, firms, etc.....	347,819.37	184,920.95	74,091.27	40,893.45	25,515.18	673,240.22
<b>Personal property:</b>						
Corporations, firms, etc.....	1,308,183.88	4,804.05	7,181.50	28,505.80	17,521.77	1,366,197.00
Other than corporations, firms, etc.....	56,402.85	18,456.26	11,255.23	19,124.48	41,164.17	146,402.99
<b>Specific property: Automobiles, carriages, etc.....</b>	131,493.24	10,941.83	17,192.87	10,567.10	37,770.57	207,965.61
<b>Personal: Poll, road, and school.....</b>	38,032.30	23,581.57	56,702.04	23,365.45	138,469.67	280,151.03
<b>Income, general:</b>						
Corporations, firms, etc.....	645,844.60	4,327.95	891.70	1,571.59	3,753.29	656,390.13
Other than corporations, firms, etc.....	115,764.44	11,790.24	4,755.27	1,808.24	3,919.90	138,038.09
<b>Income, special:</b>						
Corporations, firms, etc.....	310,088.61	2,678.50	593.45	797.87	2,733.97	316,892.40
Other than corporations, firms, etc.....	21,252.16	3,388.21	948.87	220.95	418.55	26,228.74
<b>Total.....</b>	<b>4,192,155.01</b>	<b>327,191.92</b>	<b>176,178.22</b>	<b>137,625.78</b>	<b>279,905.75</b>	<b>5,113,056.68</b>

*Taxes, by years, ended June 30, since organization of Territorial government.<sup>1</sup>*

Fiscal year.	Real property.	Personal property.	Specific property.	Personal.	Income <sup>2</sup> general.
1901.....	\$444,059.63	\$490,392.69	\$18,751.36	\$249,604.00	\$286,630.20
1902.....	532,637.09	571,248.69	20,412.19	231,455.00	202,526.44
1903.....	560,456.31	592,325.37	22,591.60	255,043.00	170,511.71
1904.....	618,890.81	607,589.82	22,998.80	240,736.00	155,978.87
1905.....	609,343.72	570,654.55	25,543.50	249,990.00	391,366.05
1906.....	611,433.76	928,841.53	47,989.70	243,955.00	187,687.91
1907.....	634,737.94	631,326.36	39,644.40	239,001.00	266,241.74
1908.....	640,051.42	635,265.31	41,350.50	244,832.00	359,500.94
1909.....	668,721.89	678,886.40	40,968.00	245,520.00	435,884.40
1910.....	709,943.35	720,252.68	46,554.50	248,663.00	421,375.68
1911.....	766,429.68	733,806.45	49,734.95	241,915.00	488,415.96
1912.....	893,331.32	821,518.95	56,930.55	243,058.00	513,396.00
1913.....	1,037,200.82	915,470.52	64,626.21	242,307.30	397,496.33
1914.....	1,068,267.52	868,613.53	74,913.10	286,246.55	373,349.09
1915.....	1,200,618.75	928,231.86	89,817.75	257,890.00	592,259.58
1916.....	1,378,454.92	1,092,683.27	110,230.97	265,636.05	799,800.86
1917.....	1,547,872.50	1,224,552.02	152,572.99	275,432.65	794,427.22
1918.....	1,967,550.23	1,510,659.70	205,901.67	279,215.07	

Fiscal year.	Income, special.	Penalties, costs, and interest. <sup>3</sup>	Inheritance.	Insurance.	Total.
1901.....		\$9,294.58	\$939.29	\$3,223.65	\$1,216,265.20
1902.....		11,847.92	6,074.34	3,846.00	1,664,181.43
1903.....		13,385.29	1,393.33	4,685.11	1,652,406.45
1904.....		15,848.97	70.00	4,623.38	1,681,269.49
1905.....		16,509.18	6,271.71	6,893.59	1,639,175.12
1906.....		13,703.59	5,879.69	8,780.61	2,601,930.53
1907.....		21,435.83	8,789.74	14,202.74	1,796,825.92
1908.....		17,097.93	21,430.06	13,978.38	1,880,847.53
1909.....	\$4,324.29	19,137.76	17,011.88	26,564.55	2,080,635.71
1910.....	377,694.27	17,262.86	150,153.11	20,141.87	2,726,650.04
1911.....	379,698.89	14,657.90	38,383.59	21,173.76	2,667,175.90
1912.....	442,336.29	14,658.02	187,974.95	25,420.95	3,173,644.99
1913.....	422,064.39	11,158.27	19,421.54	30,909.13	3,256,574.58
1914.....	116,162.54	25,728.79	30,634.00	30,385.34	2,898,447.70
1915.....	165,524.72	9,640.85	53,543.58	30,168.92	3,108,785.52
1916.....	268,369.85	15,107.43	171,303.05	33,321.18	3,927,866.30
1917.....	367,920.35	14,705.43	19,852.44	38,357.87	4,441,067.11
1918.....	343,121.14	12,181.75	76,676.75	48,718.70	5,235,452.13

<sup>1</sup> For purpose of comparison, the real and personal property and income taxes for 1906 should be about one-third less, as they include an extra half year's taxes.

<sup>2</sup> Including penalties, costs, and interest.

<sup>3</sup> Except on income taxes.

*Assessments of real and personal property, by fiscal years, since organization of Territorial government.*

Fiscal year.	Real property.	Personal property.	Total.	Fiscal year.	Real property.	Personal property.	Total.
1901.....	\$58,547,890	\$62,625,088	\$121,172,928	1910.....	\$75,792,523	\$74,475,944	\$150,268,467
1902.....	60,591,587	62,319,216	122,910,803	1911.....	77,887,826	76,696,206	154,584,032
1903.....	66,137,075	63,675,607	129,812,682	1912.....	90,896,057	85,945,744	176,841,801
1904.....	63,516,979	60,381,525	123,898,504	1913.....	93,853,810	81,347,351	175,201,161
1905.....	67,509,036	66,415,064	133,924,100	1914.....	91,050,965	70,136,331	161,187,296
1906.....	66,908,337	64,266,678	131,175,015	1915.....	99,186,323	77,414,899	176,601,222
1907.....	64,901,609	66,149,614	131,051,223	1916.....	113,922,014	93,048,215	206,970,229
1908.....	66,936,032	65,354,150	132,290,182	1917.....	129,340,001	102,580,918	231,920,919
1909.....	68,440,615	70,470,206	138,910,820	1918.....	134,543,320	101,107,647	235,650,967

*Assessable values of real and personal property, by taxation divisions, since organization of Territorial government.*

Year.	First division, city and county of Honolulu.		Second division, county of Maui.	
	Real property.	Personal property.	Real property.	Personal property.
1901.....	\$31,606,490	\$32,851,799	\$10,620,086	\$5,178,457
1902.....	32,648,883	33,233,053	10,672,459	5,230,531
1903.....	34,553,304	38,547,182	10,039,514	5,389,519
1904.....	32,133,096	37,451,555	11,046,619	5,419,616
1905.....	31,625,579	38,640,381	13,751,078	6,967,738
1906.....	31,640,862	36,792,373	13,751,567	7,375,191
1907.....	31,477,133	36,738,416	12,377,062	9,688,625
1908.....	31,159,916	36,072,436	14,045,727	8,256,132
1909.....	32,292,558	38,259,171	13,585,341	10,799,789
1910.....	34,367,440	41,126,180	17,775,146	10,296,519
1911.....	35,643,725	41,498,709	18,216,628	11,638,201
1912.....	40,448,403	43,977,046	21,458,927	13,142,716
1913.....	46,589,481	41,998,665	18,328,556	12,820,999
1914.....	49,540,725	39,234,477	16,142,677	9,505,264
1915.....	53,574,531	40,989,673	18,278,238	11,471,742
1916.....	57,957,035	43,832,979	20,911,553	16,615,697
1917.....	66,528,200	49,075,650	24,245,963	19,467,187
1918.....	70,246,305	49,381,175	23,869,365	16,428,894

Year.	Third division, county of Hawaii.		Fourth division, county of Kauai.		Total.
	Real property.	Personal property.	Real property.	Personal property.	
1901.....	\$11,355,972	\$16,098,569	\$4,965,342	\$8,496,213	\$121,172,928
1902.....	11,408,352	16,150,943	5,017,715	8,548,587	122,910,803
1903.....	16,135,131	13,342,340	5,430,126	6,396,566	129,812,682
1904.....	14,916,221	11,833,177	5,421,043	6,677,177	123,898,504
1905.....	15,179,975	12,640,727	6,352,404	8,166,218	133,924,100
1906.....	14,948,462	12,036,906	6,567,446	8,061,708	131,175,015
1907.....	14,410,434	11,759,984	6,636,980	7,962,589	131,051,223
1908.....	15,234,369	12,590,260	6,496,020	8,433,322	132,290,182
1909.....	15,908,203	13,164,880	6,654,513	8,246,365	138,910,820
1910.....	16,831,448	14,097,093	6,818,480	8,956,202	161,187,296
1911.....	16,751,660	14,117,085	7,275,813	9,442,211	154,584,032
1912.....	20,701,679	18,384,858	8,280,048	10,441,524	176,841,801
1913.....	20,303,521	17,190,435	8,632,252	9,346,952	175,201,161
1914.....	17,484,322	13,754,966	7,883,171	7,641,224	161,187,296
1915.....	19,108,813	15,331,548	8,224,441	9,622,036	176,601,222
1916.....	24,973,421	20,521,689	10,680,005	12,077,850	206,970,229
1917.....	27,945,858	22,238,663	10,619,060	11,799,418	231,920,919
1918.....	29,633,360	23,807,933	10,794,290	11,489,645	235,650,967

*Assessed value of real and personal property for 1918, by taxation divisions.*

Taxation divisions.	Real property.	Personal property.	Total, 1918.	Total, 1917.	Increase (+) or decrease (-), 1918.
					<i>Per cent.</i>
First, city and county of Honolulu.....	\$70,246,305	\$49,381,175	\$119,627,480	\$115,603,850	+3.48
Second, county of Maui.....	23,869,365	16,428,894	40,298,259	43,713,180	-7.81
Third, county of Hawaii.....	29,633,360	23,807,933	53,441,293	50,184,511	+6.48
Fourth, county of Kauai.....	10,794,290	11,489,645	22,283,935	22,419,378	-.60
Total for the Territory.....	134,543,320	101,107,647	235,650,967	231,920,919	+1.17

*Assessed value of real and personal property for 1918, by races, etc., of taxpayers.*

Taxpayers.	Real property.		Personal property.		Total assessed value.	Percentage.
	Number of taxpayers.	Assessed value.	Number of taxpayers.	Assessed value.		
Corporations, firms, etc.....	817	\$88,643,557	1,044	\$88,665,035	\$177,308,592	75.24
Anglo-Saxons.....	3,379	24,306,847	2,208	3,976,871	28,283,718	12.00
Hawaiians.....	5,921	11,814,622	1,977	1,798,342	13,612,964	5.78
Chinese.....	1,074	2,801,484	1,500	1,578,635	4,380,119	1.86
Portuguese and Spanish.....	2,511	5,331,088	1,539	821,069	6,152,157	2.61
Japanese.....	1,056	1,645,722	3,336	4,267,695	5,913,417	2.61
Total.....	14,758	134,543,320	11,604	101,107,647	235,650,967	100.00

*Cost of assessing and collecting taxes, years ended June 30.<sup>1</sup>*

Fiscal year.	Actual cost.	Percentage of amount collected.	Fiscal year.	Actual cost.	Percentage of amount collected.
1901.....	\$54,996.06	4.52	1910.....	\$65,632.11	2.56
1902.....	63,300.33	3.81	1911.....	63,516.59	2.44
1903.....	70,194.46	4.25	1912.....	73,520.67	2.48
1904.....	71,362.16	4.24	1913.....	78,086.02	2.44
1905.....	59,665.71	3.66	1914.....	81,352.68	2.86
1906.....	73,350.92	2.83	1915.....	89,789.99	2.97
1907.....	66,711.41	3.78	1916.....	85,480.08	2.39
1908.....	67,160.18	3.64	1917.....	92,719.92	2.12
1909.....	62,768.42	3.08	1918.....	94,111.53	1.84

<sup>1</sup> Not including inheritance and insurance taxes.<sup>2</sup> For purposes of comparison, 3.81 should be used instead of 2.83.**CORPORATIONS.**

During the last fiscal year a total of 55 corporations were created and 16 dissolved, as follows:

	Created.	Dissolved.
Mercantile.....	46	14
Agriculture.....	1	2
Steamship.....	1	.....
Eleemosynary.....	7	.....
Total.....	55	16

Leaving at the close of the year 792 domestic corporations, an increase of 39 in all. The total capitalization of domestic corporations other than eleemosynary, etc., is \$171,383,943, an increase of \$1,307,715, or 0.76 per cent, for the year. Foreign corporations to the number of 144, as compared with 153 of the preceding year, are authorized to do business in the Territory. Three national banks also do business in the Territory as compared with two of the preceding year. The classes, number, and capitalization of the domestic corporations now in existence incorporated before and after the transfer of sovereignty to the United States are as follows:

*Hawaiian corporations.*

Class.	Number.			Capital.		
	Incorporated before Aug. 12, 1898.	Incorporated after Aug. 12, 1898.	Total.	Incorporated before Aug. 12, 1898.	Incorporated after Aug. 12, 1898.	Total.
Agricultural.....	47	106	153	\$47,966,750	\$35,909,015	\$83,875,765
Mercantile.....	36	394	433	19,901,125	43,815,093	63,716,218
Railroad.....	5	4	9	7,370,000	7,139,960	14,509,960
Street car.....	.....	2	2	.....	1,950,000	1,950,000
Steamship.....	1	1	2	3,000,000	6,000	3,006,000
Bank.....	1	6	7	600,000	1,650,000	2,250,000
Savings and loan.....	.....	13	13	.....	776,000	776,000
Trust.....	1	6	7	200,000	900,000	1,100,000
Insurance.....	.....	2	2	.....	200,000	200,000
Eleemosynary.....	34	130	164	.....	.....	.....
Total.....	128	664	792	79,037,875	92,346,068	171,383,943

*Income taxes<sup>1</sup> collected for the year ended June 30, 1918, by races, etc., of taxpayers.*

Taxpayers.	General income.		Special income.		Total.	Percent- age.
	Number tax-payers.	Amount collected.	Number tax-payers.	Amount collected.		
Corporations, firms, etc.....	455	\$656,817.80	429	\$316,974.33	\$973,792.13	85.74
Anglo-Saxons.....	3,261	114,280.32	463	21,121.86	135,402.18	11.94
Hawaiians.....	300	11,406.79	30	3,388.21	14,795.00	1.31
Japanese.....	165	1,661.94	22	404.25	4,177.70	.36
Portuguese and Spanish.....	248	4,678.18	20	948.87	5,627.05	.49
Chinese.....	128	3,773.45	12	220.95	1,882.89	.16
Total.....	4,557	792,618.48	976	343,058.47	1,135,676.95	100.00

<sup>1</sup> Exclusive of interest, penalties, and costs.

## BANKS.

Twenty-three banks were in operation during the year. These were distributed as follows: Nine in Honolulu; one each at Schofield and Waipahu, on the island of Oahu; three at Hilo; one each at Honokaa, North Kona, and North Kohala, on the island of Hawaii; one each at Wailuku, Kahului, Paia, and Lahaina, on the island of Maui; and one each at Lihue and Waimea, on the island of Kauai. Three are national banks, namely, one at Honolulu, one at Schofield, and one on the island of Maui. One of the banks is solely a savings bank, two are solely commercial, and the remainder are both commercial and savings banks.

*Deposits in banks since organization of Territorial government.*

Fiscal years.	Number of banks.	Commercial deposits Dec. 31.	Savings deposits June 30	Total.
1901.....	8	\$3,857,413.16	\$804,718.01	\$4,662,131.17
1902.....	9	4,094,919.90	1,073,581.66	5,168,501.46
1903.....	9	3,694,965.00	1,102,707.24	4,797,672.24
1904.....	9	4,159,078.89	1,372,157.00	5,531,235.89
1905.....	9	3,993,052.90	1,695,326.76	5,688,379.66
1906.....	9	5,022,495.26	2,527,943.98	7,550,439.22
1907.....	11	4,966,042.04	2,777,554.40	7,743,596.44
1908.....	11	5,074,836.16	2,588,722.87	7,663,559.03
1909.....	11	6,334,991.42	3,322,827.79	9,657,819.21
1910.....	11	9,033,385.97	4,290,919.57	13,324,305.54
1911.....	16	10,289,707.89	5,020,555.62	15,310,263.51
1912.....	17	12,667,162.39	5,521,973.11	18,189,135.50
1913.....	17	11,641,901.30	5,384,395.72	17,026,297.02
1914.....	18	10,371,874.60	6,275,790.63	16,647,665.23
1915.....	19	12,378,041.53	7,736,569.32	20,114,610.85
1916.....	19	17,317,339.40	9,061,910.28	26,379,249.68
1917.....	22	22,486,524.31	10,205,496.70	32,692,021.01
1918.....	23	24,620,004.80	9,892,708.08	34,512,712.88

*Savings bank accounts, by races, June 30, 1918.*

Races.	Population, 1917.		Accounts.		Deposits.		
	Estimat- ed.	Per cent.	Number.	Per cent.	Average.	Total.	Per cent.
Japanese.....	102,479	40.88	9,035	27.06	\$115.13	\$1,040,180.33	10.52
Chinese.....	22,100	8.82	2,828	8.47	254.52	719,768.39	7.27
Hawaiians.....	39,300	15.68	5,284	15.83	87.68	463,324.06	4.69
Portuguese.....	23,990	9.57	3,913	11.72	369.23	1,444,796.09	14.60
All others.....	62,758	25.05	12,324	36.92	508.80	6,224,639.21	62.92
Total.....	250,627	100.00	33,384	100.00	296.33	9,892,708.08	100.00

**INSURANCE.**

The average fire losses throughout the United States on every \$100 paid in premiums is approximately \$56. In Hawaii, where such statistics have been kept since 1903, the average loss is only \$13.77.

This shows that fire-insurance rates here are very high as compared with the mainland. Fire underwriters with whom the matter is taken up point to the conflagration hazard and there is no question that this hazard exists in the two principal cities of the Territory, Honolulu and Hilo. The treasurer of the Territory, who is ex officio fire marshal, has recently issued certain regulations whose enforcement it is hoped will very materially reduce this hazard with a consequent reduction of fire rates.

Insurance companies pay, in lieu of other taxes, a tax of 2 per cent on gross premiums, less return premiums and reinsurance, and, in the case of life insurance companies, less expenses also. In addition, insurance agents are required to pay certain license fees, and there are also filing and other fees.

The number of insurance companies doing business in the Territory in 1917 was 101, divided as follows: 45 fire; 7 marine; 10 life; 4 fire and marine; 3 fire, marine, and automobile; 10 fire and automobile; 1 fire, marine, automobile, and tourist; 1 fire, automobile, fidelity and surety, workmen's compensation, live stock, and medical defense; 1 fire, automobile, fidelity and surety, plate glass, package, and workmen's compensation; 1 marine and automobile; 1 life and



accident and health; 3 accident and health; 1 accident and health, automobile, burglary, employers' liability, fidelity and surety, plate glass, property damage, workmen's compensation, and live stock; 1 accident and health, automobile, fidelity and surety, property damage, and workmen's compensation; 1 accident and health, automobile, burglary, employers' liability, fidelity and surety, and workmen's compensation; 1 accident and health, burglary, employers' liability, fidelity and surety, plate glass, and property damage; 1 accident and health, burglary, employers' liability, property damage, and workmen's compensation; 1 accident and health, burglary, and fidelity and surety; 1 accident and health, employers' liability, property damage, and workmen's compensation; 1 accident and health and property damage; 1 burglary and fidelity and surety; 1 employers' liability and workmen's compensation; 1 automobile, employers' liability, fidelity and surety, and plate glass; 2 plate glass; 1 workmen's compensation.

*Recapitulation of insurance business transacted in the Territory of Hawaii for 1917.*

Class.	Insurance written.	Premiums.	Renewal premiums.	Losses, claims, etc., paid.
Fire.....	\$48,508,089.66	\$857,887.65	.....	\$41,714.87
Marine.....	142,081,108.34	453,528.41	.....	175,098.64
Life.....	6,599,187.00	350,248.30	\$869,880.19	297,364.31
Accident and health.....	.....	58,804.84	.....	15,528.86
Automobile.....	.....	65,944.54	.....	18,390.97
Burglary.....	.....	861.46	.....	43.19
Employers' liability.....	.....	13,715.24	.....	7,070.70
Fidelity and surety.....	.....	49,153.68	.....	2,947.99
Plate glass.....	.....	3,683.48	.....	856.20
Package.....	.....	230.00	.....	.....
Property damage.....	.....	7,648.86	.....	452.25
Workmen's compensation.....	.....	126,738.97	.....	30,495.86
Live stock.....	.....	197.75	.....	.....
Medical defense.....	.....	115.58	.....	.....
Tourist.....	.....	40.20	.....	.....
Total.....	197,188,383.00	1,985,253.96	869,880.19	590,269.84
Total in 1916.....	148,747,715.01	1,429,155.68	749,672.47	274,282.71
Increase in 1917.....	58,440,667.99	562,098.38	120,187.72	316,087.13

*Comparative statement of fire insurance business transacted in the Territory of Hawaii for the calendar years 1903-17 inclusive.*

Year.	Insurance written.	Premiums.	Losses, claims, etc., paid.	Percentage loss to amount insured.	Loss paid for each \$100 premium.
1903.....	\$19,888,471.92	\$364,628.51	\$153,261.17	0.0077	\$42.00
1904.....	20,374,737.27	364,947.07	96,215.65	.0047	39.30
1905.....	22,559,559.00	377,763.00	28,456.00	.0012	7.53
1906.....	21,926,280.95	389,813.91	160,249.64	.0075	42.65
1907.....	23,270,292.95	442,361.19	37,512.67	.0016	8.80
1908.....	25,214,465.13	445,096.44	39,096.32	.0015	2.09
1909.....	25,230,095.86	489,361.49	10,259.71	.0004	.....
1910.....	24,343,508.77	508,262.80	69,778.62	.0028	12.70
1911.....	26,527,407.86	549,456.92	95,494.35	.0036	17.28
1912.....	27,131,432.65	585,292.56	47,781.56	.0017	8.16
1913.....	28,385,448.72	567,821.25	87,630.79	.0030	15.43
1914.....	29,632,953.11	558,868.90	64,763.98	.0021	11.88
1915.....	36,014,438.62	602,634.14	82,171.21	.0023	12.88
1916.....	39,784,264.66	692,332.98	53,217.44	.0013	7.66
1917.....	48,508,089.66	857,887.65	41,714.87	.0008	4.86
Total.....	418,602,442.13	7,796,587.81	1,073,603.13	.0028	12.77

## COMMERCE.

*Imports and exports, by fiscal years, since organization of Territorial government.*

Years	Imports.			Exports.			Total imports and exports.
	United States. <sup>1</sup>	Foreign countries.	Total.	United States.	Foreign countries.	Total.	
1901.....	(3)	\$2,826,633	\$2,826,633	\$27,935,885	\$117,958	\$28,053,843	\$30,880,476
1902.....	(3)	3,036,583	3,036,583	24,730,080	63,547	24,793,627	27,830,190
1903.....	\$12,675,026	3,142,013	15,817,039	26,242,889	33,569	26,276,458	42,092,477
1904.....	11,987,050	3,797,641	15,784,691	25,157,255	47,620	25,204,875	40,989,566
1905.....	11,703,519	3,014,964	14,718,483	36,114,985	56,541	36,171,526	50,889,009
1906.....	13,224,566	3,275,242	16,499,808	26,834,210	56,313	26,940,523	43,440,331
1907.....	14,225,210	4,151,709	18,376,919	29,134,467	229,014	29,364,381	47,741,300
1908.....	15,903,325	4,682,399	19,585,724	41,640,815	597,640	42,238,455	62,224,179
1909.....	17,391,406	4,033,574	21,424,980	40,437,352	84,152	40,521,504	61,946,484
1910.....	20,531,913	4,606,334	25,138,247	46,133,649	302,763	46,436,412	71,624,659
1911.....	22,322,121	5,190,449	27,512,570	41,207,941	730,642	41,938,583	69,451,153
1912.....	23,095,878	5,598,444	28,694,322	55,076,165	373,273	55,449,438	84,143,780
1913.....	29,129,409	6,873,531	36,002,940	42,713,294	758,646	43,471,940	79,474,880
1914.....	29,267,609	6,282,558	35,550,257	40,678,827	915,245	41,594,072	77,144,329
1915.....	20,348,832	5,716,023	26,064,855	62,306,507	61,549	62,368,356	88,433,211
1916.....	28,029,681	6,068,529	34,098,210	64,445,631	225,321	64,670,852	98,769,062
1917.....	39,875,390	6,482,951	46,358,341	74,430,119	635,964	75,115,983	121,474,324
1918.....	45,004,156	6,797,048	51,801,204	79,395,398	1,151,218	80,546,606	132,347,810
	356,538,981	83,152,825	439,691,806	784,765,419	6,443,975	791,209,394	1,230,901,200

<sup>1</sup> These figures include specie except for the last seven years, but since 1903 most of the specie has been handled through the post office by registered mail, and the amount thereof is not included in this table. During the last fiscal year the shipments of gold and silver coin other than those made through the mails were: From the United States, \$2,924,800; from foreign countries, nothing; to the United States, \$193,496.00; to foreign countries, \$214,849.00; total \$3,333,145.

<sup>2</sup> Not kept.

*Imports and exports, by countries, fiscal years 1917-18.*

Countries.	Imports.		Exports.	
	1917	1918	1917	1918
Australia and Tasmania.....	\$164,571	\$118,443	\$8,684	\$20,284
Other British Oceania.....	70,166	71,974	76,194	11,923
British India.....	1,130,449	834,512	453	.....
Canada.....	28,408	345,340	189,707	88,856
Chile.....	899,358	1,001,089	40	.....
France.....	7,902	4,304	.....	.....
Germany.....	2,507	6,064	.....	.....
Hongkong.....	428,125	385,011	5,348	11,125
Japan.....	3,406,571	3,672,468	203,752	626,624
United Kingdom.....	86,662	68,991	7,744	196
Other foreign.....	258,234	288,852	173,942	242,210
Total foreign.....	6,482,951	6,797,048	635,864	1,151,218
United States.....	39,875,390	45,004,156	74,430,119	79,395,398
Grand total.....	46,358,341	51,801,204	75,115,983	80,546,606

*Domestic exports, by articles, fiscal years 1917-18.*

Articles.	United States, 1918.		Foreign, 1918. <sup>1</sup>		Total, 1918.		Total, 1917.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Sugar.....	<i>Pounds.</i>		<i>Pounds.</i>		<i>Pounds.</i>		<i>Pounds.</i>	
Raw.....	1,063,701,147	\$62,076,956	.....	.....	1,063,701,147	\$62,076,956	1,127,825,256	\$90,137,962
Refined.....	27,207,650	2,031,584	19,796	\$1,427	27,227,446	2,033,011	34,812,541	2,605,810
Coffee, raw.....	1,967,900	275,686	1,238,122	191,003	3,206,022	466,689	2,566,471	391,166
Fruits and nuts.....	.....	8,525,676	.....	115,162	.....	8,640,838	.....	8,355,895
Rice.....	1,247,731	84,813	.....	.....	1,247,731	84,813	3,527,846	166,779
Hides.....	1,734,919	398,719	.....	.....	1,734,919	398,719	1,484,837	295,965
Other.....	.....	5,972,571	.....	813,945	.....	6,786,516	.....	3,040,828
Total.....	1,086,850,347	79,366,005	1,257,918	1,121,537	1,087,117,265	80,487,542	1,170,215,951	74,992,806

<sup>1</sup> Figures on foreign exports are for the 12 months ended Apr. 1, 1918.

<sup>2</sup> Mostly pineapples.

*Customs receipts, fiscal years, since organization of Territorial government.*

Fiscal year.	Amount.	Fiscal year.	Amount.
1900 (half of June).....	\$45,523.99	1911.....	\$1,654,761.34
1901.....	1,219,618.93	1912.....	1,643,197.37
1902.....	1,327,518.23	1913.....	1,569,513.89
1903.....	1,193,677.83	1914.....	1,184,416.12
1904.....	1,229,492.15	1915.....	1,019,534.63
1905.....	1,043,404.40	1916.....	1,161,051.12
1906.....	1,218,764.13	1917.....	1,169,084.80
1907.....	1,458,843.48	1918.....	1,009,243.48
1908.....	1,550,157.32		
1909.....	1,398,379.91	Total.....	23,969,502.27
1910.....	1,575,319.15		

*Number and tonnage of vessels, by fiscal years, since organization of Territorial government.<sup>1</sup>*

Year.	Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.
1901.....	705	952,504	701	942,021
1902.....	593	917,089	597	918,547
1903.....	551	980,847	552	971,359
1904.....	488	933,847	497	936,637
1905.....	486	982,116	452	973,279
1906.....	453	1,013,841	450	1,012,867
1907.....	428	1,049,836	439	1,046,141
1908.....	416	1,075,939	412	1,069,328
1909.....	391	1,159,118	394	1,159,749
1910.....	437	1,308,801	427	1,292,875
1911.....	427	1,343,876	431	1,347,371
1912.....	431	1,370,315	429	1,359,109
1913.....	483	1,582,255	476	1,577,102
1914.....	447	1,660,888	445	1,642,558
1915.....	456	1,605,925	456	1,674,845
1916.....	453	1,437,395	461	1,469,617
1917.....	489	1,374,511	479	1,390,821
Total.....	8,134	20,749,303	8,078	20,684,216

<sup>1</sup> Owing to war conditions figures or tonnage and number of vessels calling at island ports during the last year are not available for publication.

*Value carried by American and foreign vessels.*

Vessels.	Fiscal year 1916.			Fiscal year 1917.		
	Imports.	Exports.	Total.	Imports.	Exports.	Total.
American.....	\$29,425,654	\$64,495,108	\$93,920,762	\$41,084,066	\$74,638,677	\$115,722,743
Foreign.....	4,672,556	175,744	4,848,300	5,274,275	477,306	5,751,581
Total.....	34,098,210	64,670,852	98,769,462	46,358,341	75,115,983	121,474,324

*Vessels, by ports, fiscal year 1917.*

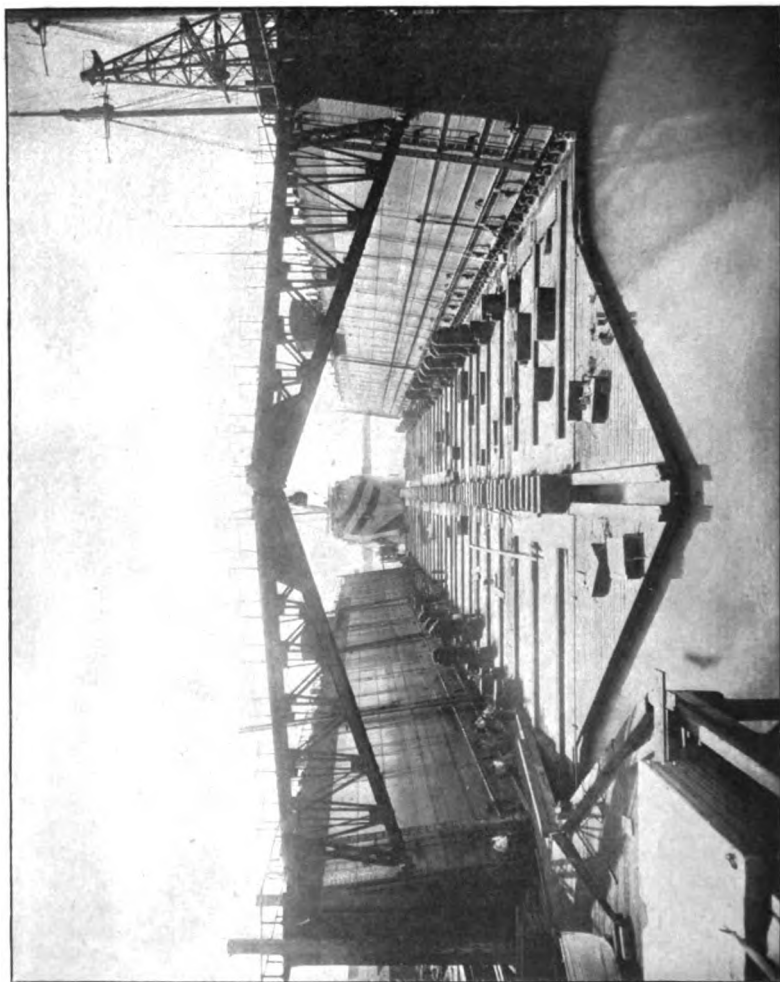
	In coastwise trade. <sup>1</sup>				In foreign trade.			
	Entered.		Cleared.		Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Honolulu.....	260	726,607	277	810,842	149	538,783	125	478,129
Hilo.....	48	77,557	36	64,370	.....	.....	1	1,105
Kahului.....	15	17,948	17	21,422	1	1,778	.....	.....
Koloa.....	7	4,708	14	9,482	6	4,953	.....	.....
Mahukona.....	3	2,177	9	7,471	.....	.....	.....	.....
Total.....	333	828,997	353	913,587	156	546,514	126	477,234

<sup>1</sup> Includes vessels in traffic between this Territory and the mainland, but not vessels exclusively in traffic between the islands. Transports and vessels calling for bunker coal or fuel oil not included in above.



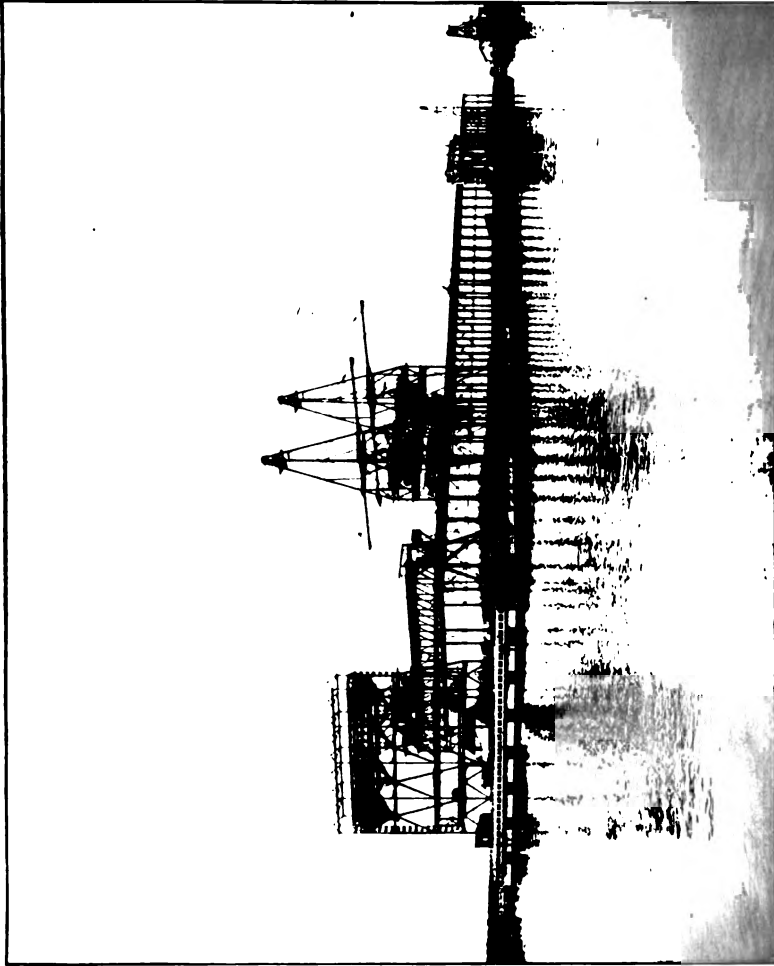
STEAMER ENTERING SUBMERGED DOCK.

646-1



SHOWING DOCK WHEN LIFTED.

046—2



NEW PLANT FOR DISCHARGING COAL AND BUNKERING AT HONOLULU.



## TRANSPORTATION FACILITIES.

Owing to the Territory's dependence on water lines for passenger, freight, and mail accommodations, the scarcity of shipping facilities as a result of the war has made itself felt to a considerable extent during the last year. Tourist travel has suffered a marked drop from that of previous years.

Of special importance to Hawaii as a stopping place for vessels crossing the Pacific Ocean is the big plant completed recently by the Inter-Island Steam Navigation Co. of Honolulu for the discharging and bunkering of coal.

The plant is said to be as modern in arrangement and mechanism as any in existence, being electrically operated throughout. The coal, after being weighed, is delivered through adjustable chutes directly to the bunker hatches, as high as 30 feet above the water and 30 feet from the face of the dock.

A floating dry dock is also maintained by this company, which structure has a capacity of 4,500 tons, but which has lifted a vessel of 5,300 tons without showing strain from the extra load. An addition is to be made to the dock, thus increasing the capacity by 3,500 tons.

## INTERISLAND TRAFFIC.

Most of the interisland traffic is conducted by the Inter-Island Steam Navigation Co. (Ltd.), which operates a fleet of 12 steamers, varying in length from 136.1 feet to 252 feet, and from 11.5 to 18 feet draft; from 341 to 1,566 gross tons and from 201 to 940 net tons. The total tonnage is 8,987 gross and 5,834 net.

During the fiscal year this company carried 90,198 passengers and 402,145 tons of freight, which is an increase of 10,983 passengers and an increase of 52 tons of freight as compared with the previous period.

The Oahu Shipping Co. operates a fleet of six vessels, which carried approximately 39,726 tons of freight during the year. No passengers are carried by this company.

## TRAFFIC WITH THE MAINLAND.

The Matson Navigation Co. operated five vessels, the *Wilhelmina*, *Matsonia*, *Maui*, *Lurline*, and *Manoa*, in the passenger service between San Francisco and island ports. Of these the *Maui*, *Matsonia*, and *Wilhelmina* have been withdrawn by the United States Government and are now presumably in the war zone.

The *President* and *Governor*, large passenger carriers, were also consigned to this company, each vessel making about five trips. They were later withdrawn by the Government. At present the company is operating the *Sachem*, a vessel with a total passenger capacity of 42 persons. This vessel is owned by the United States Shipping Board.

In the freight trade the company has had the steamers *Hyades*, *Enterprise*, and auxiliary schooner *Annie Johnson* and the auxiliary bark *R. P. Rithet*, which latter was burned at sea some months ago.



Besides these the company has had some sundry freight vessels under United States and Swedish registry consigned to it during the year, all of which have taken cargoes of sugar on their return to San Francisco. Seven sailing vessels owned by the Alaska Packers' Association were also consigned to the company for a short time, and all took sugar cargoes to San Francisco.

The American-Hawaiian Steamship Co., which had been in the Hawaiian trade since January, 1901, handled a majority of the freight traffic between the Territory and the Atlantic coast previous to the past year. The steamers of this company are all now engaged in the transportation of Government freight between Atlantic coast ports and France.

#### THROUGH SERVICE.

The Pacific Mail Steamship Co. has continued to operate the *Ecuador*, *Venezuela*, and *Colombia*, vessels of 14,000 tons each, between San Francisco and Oriental ports with stopovers at Honolulu both ways. In addition, the company has recently inaugurated a Manila-East India service with two 16,000-ton passenger and freight steamers, the *Santa Cruz* and *Colusa*, which also stop regularly at Honolulu on the homeward voyage. The *Persia Maru*, a 9,000-ton steamer, a proffer of which by the Japanese Government was recently accepted by the United States Shipping Board, has been placed under the management of the company and is now in regular service between San Francisco and Honolulu and Manila.

The China Mail Steamship Co. (Ltd.) operates the *China*, a vessel of 3,186 tons net, and carrying first, second, and third class passengers between San Francisco, Honolulu, and the Orient. It is anticipated that this company will also shortly place the *Nanking* on the same run.

Until May of this year the Toyo Kisen Kaisha was operating a fleet of nine steamers between China, Japan, Honolulu, San Francisco, and South American ports, all of which vessels made regular calls at Honolulu. Of the nine steamers six were on the San Francisco-Orient run and the others on the South American run. All of the South American steamers called at the port of Hilo on the outward voyage from Japan. The *Persia Maru* of the San Francisco-Orient route and the *Seiyo Maru* of the Orient-South American run have now been turned over to the United States. The *Nippon Maru* replaces the *Seiyo Maru* on the South American run, while no vessel has yet been provided in substitution of the *Persia Maru* and the *Nippon Maru* on the San Francisco schedule.

After withdrawing its vessels for several months, the Nederland Royal Mail and Rotterdam Lloyd Joint Service is again operating with 7 steamers on a 40-day service between Batavia, Java, and San Francisco, touching fortnightly at Honolulu and Japanese and Chinese ports.

The Oceanic Steamship Line is operating two vessels on a three weeks' service between San Francisco and Sydney, by way of Honolulu and Pago Pago. One other vessel of the company was taken over by the United States Government a few months ago.

It is asserted that in the near future the Commonwealth Government Line may begin operating a fleet of vessels between Australia, Honolulu, and Pacific coast ports.

The Canadian-Australasian Royal Mail Line continues to operate but two passenger and freight steamers on the Sydney, Auckland, Suva, Honolulu, and Vancouver route, which vessels are on a four-week schedule each way. One steamer has a gross tonnage of 13,500 tons, is 543 feet in length, and has accommodations for 667 passengers. It is asserted that at the conclusion of the European war this company will operate an additional steamer the size of the *Niagara*, and revert to its old schedule in effect prior to the war.

The Standard Oil Co. operates a fleet of five steamers between the mainland and the Territory. These vessels delivered during the calendar year 1917 a total of 477,875 barrels of fuel and refined oils, 26,433 cases and 989 barrels of lubricating and refined oils, and 644 barrels of asphaltum.

The Associated Oil Co. operates three vessels, and during the fiscal year these delivered 612,655.75 barrels of fuel oil, 141,232 gallons of distillate, and 90,512 gallons of engine and stove distillate.

The Union Oil Co. of California received during the fiscal year 462,466.17 barrels of oil at Honolulu, 61,077.77 barrels at Hilo and 9,780 barrels at Mahukona, making a total of 53,332.94 barrels for all ports.

A number of sailing vessels continue to bring general merchandise and coal from foreign ports, and several small Shipping Board boats have recently been assigned to the islands to move the 1918 sugar and pineapple crop.

### STEAM RAILROADS.

#### Statistics of steam railroads.

Island.	Number.	Track.	Increase.	Gauge.	Rolling stock.		
					Locomotive.	Passenger cars.	Freight cars.
Oahu.....	2	154.16	1.56	Ft. in. { 3 0 3 0 4 8 1/2 3 0 2 6	26	50	679
Hawaii.....	3	128.70			16	16	268
Maul.....	1	41.28	.20		9	6	172
Kauai.....	1	18.22			1		24
Total.....	7	342.36	1.76		52	72	1,137

Island.	Freight carried.	Passengers carried.	Bonds outstanding.	Rate of interest.	Capital stock.
Oahu.....	949,157	1,442,154	\$3,000,000	5	\$5,150,000
Hawaii.....	245,798	399,855	2,350,000	5	2,954,960
Maul.....	201,974	118,426			300,000
Kauai.....	12,512		252,000	6	500,000
Total.....	1,409,441	1,960,434	4,602,000		9,904,960

## PRIVATE (PLANTATION) RAILWAYS.

Island.	Number.	Track.	Increase.	Rolling stock.		
				Locomotives.	Passenger cars.	Freight carr.
Oahu.....	9	197.25	10	33	8	2,710
Hawaii.....	13	103.74	2.33	29	2	1,663
Maul.....	6	161.76	12.96	25	.....	2,774
Kauai.....	9	171.51	4.29	36	.....	3,422
Total.....	37	634.26	29.58	123	10	10,639
Grand total.....	44	976.621	33.01	175	82	11,778

## STREET RAILROADS.

The Honolulu Rapid Transit & Land Co. controls and operates the only street railway system in this Territory, same being located in the city of Honolulu. It is an electric line, partly single and partly double track. During the year the company expended for betterment of the system \$92,962.66. Its outstanding capital stock is \$2,000,000. Its gross income for the calendar year of 1917 was \$726,603.40, an increase of \$56,621.66 over that of the preceding year. Its disbursements were \$772,991.78, an increase of \$125,228.37. The number of fare passengers carried was 14,378,092, an increase of 1,164,392 over that of the previous year; the number of free passengers carried, being principally policemen, letter carriers, and firemen, was 191,302, an increase of 30,197. School children are carried at half rates. The car mileage was 2,018,815.31.

The franchise for the construction of a street railway system for the district of South Hilo, island of Hawaii, was granted the Hilo Traction Co. on August 1, 1912, and was twice amended by Congress, the time being to August 7, 1918, in which construction work should be undertaken, or in lieu of which a bona fide contract should be entered into by the holders of the franchise for either materials or construction work in an amount not less than \$20,000. Conditions arising from the war made it impossible for the promoters of this project to close arrangements for the financing, as well as presenting many difficulties in securing the requisite materials and supplies. However, a definite order has been placed for 3½ miles of track materials which are expected to be on the ground before the close of the calendar year.

## LIGHTHOUSES.

Honolulu is the headquarters of the nineteenth lighthouse district, which embraces all of the islands comprising the Territory of Hawaii and certain other islands in the Pacific Ocean.

At the close of the year there were in commission 1 hyperradiant light, 2 second-order lights, 1 third-order light, 3 fourth-order lights, 2 fifth-order lights, 32 lens-lantern lights, 5 electric lights, 7 automatic acetylene gas buoys, and one lighthouse vessel, the tender *Kukui*.

On the island of Hawaii two lights were improved, Kauhola Point Light Station was changed from a lens-lantern light to a fourth-

order incandescent oil-vapor revolving flashing light, and Alia Point Light was changed from a lens-lantern light to an automatic acetylene gas flashing light in a new structural steel tower.

On the island of Maui an automatic acetylene gas flashing light was established at Hanamanioa Point, and an automatic acetylene gas lighted buoy was established in place of the unlighted whistling buoy in Waihee Reef, entrance to Kahului Harbor.

On the island of Oahu improvements were made in the channel aids of Honolulu Harbor, including the establishment of a range of electric lights, the front light on the roof of Pier 7, and the rear light on a skeleton tower on the roof of the McCandless Building. Preliminary plans are being prepared for a system of lights in Pearl Harbor, for which Congress appropriated \$90,000, and a site is being acquired for the establishment of an automatic acetylene gas light at Kaena Point.

### TELEGRAPHS AND TELEPHONES.

In addition to the cable system across the Pacific Ocean, which has been in operation a number of years, there are three powerful wireless plants, all of which are either wholly or in part operated by the Government. The Government also operates the interisland wireless system of the Mutual Telephone Co. of Honolulu, having taken it over at the beginning of the war.

The sending station of the Marconi Wireless Co., which was taken over by the Government upon the day war was declared, was turned back on March 20, 1918, but is being held in readiness, subject to the call of the Government, to be placed in operation upon short notice. Considerable expenditure of money is being made by the company in replacing the heavy plow steel guy cables supporting the steel masts, with wrapped and tarred steel cables to prevent deterioration from the elements. The Marconi sending station at Koko Head was taken over by the Government on January 8, 1918, and is in operation.

The Mutual Telephone Co. operates the principal telephone system on the island of Oahu, and now has in operation 43 miles of conduit, 113 miles of cable, and 1,500 miles of open wire in Honolulu alone. Outside of the city it has 1,164 miles of copper wire, 1,675 miles of iron wire, and 715 instruments.

On the island of Hawaii the Hawaii Telephone Co. of Hilo operates 1,421 instruments, with 2,499 miles of open wire. The Kohala Telephone Co., on the same island, operates 98 telephones on 225 miles of wire.

The Maui Telephone Co. of Wailuku, Maui, operates 965 instruments, with 1,812 miles of wire, and the Kauai Telephonic Co. of Lihue, Kauai, has 280 telephones and 495 miles of wire in operation.

### POSTAL SERVICE.

Interior changes made during the last fiscal year added to the floor space of the present Honolulu post office and gave better facilities for the transaction of its largely increased business. The alterations added 166 lock boxes, enabling the post office to accommodate many

patrons who desired box service but who for years had not been able to secure boxes. These improvements were in the nature of a makeshift adopted in view of the indefinite postponement of the construction of the new Federal building and post office.

The post office could use three times its present floor space. A new building is much needed. However, there is no appeal at this time from the decision of the Treasury and Post Office authorities that the building must wait until after the war.

Upon the recommendation of the postmaster, the Postal Regulations were amended, effective May 1 last, making money orders issued at a post office in Hawaii payable at any other post office in Hawaii under certain necessary restrictions. This adds materially to the convenience of the Money-Order System as a means of making small remittances within the Territory.

Changes of administrative methods centralizing accounting and other functions at Honolulu, several additions to the normal work of the office in the nature of war duties, including the sale of War Savings and Thrift Stamps, which to July 31 had realized nearly \$800,000 cash, have added largely to the duties and responsibilities of the post office during the past year. To meet the situation the postmaster recommended and secured the addition of two carriers and two clerks to the working force.

The steady growth of Honolulu is shown by the following tabulation of the general receipts at the post office for the past five years:

**Fiscal year:**

1914	-----	\$137, 632. 31
1915	-----	140, 219. 19
1916	-----	158, 659. 10
1917	-----	176, 557. 24
1918	-----	204, 553. 83

The increase for 1918 over 1917 is \$27,996.59. But for the falling off of tourist travel the 1918 receipts would have been much larger. The increase is partially explained by the increase in the rate of first-class postage. It is an interesting fact that receipts exceeded disbursements for 1918 by \$101,266.50.

The statistics of money-order business at the Honolulu post office show that while there was a slight falling off in the number of domestic and international money orders issued during the last fiscal year as compared with the preceding one there was nevertheless a substantial increase in the amount called for by the orders. Domestic money orders issued in the fiscal year 1918 numbered 43,184 and amounted to \$704,485.64. The fees aggregated \$3,823.96. International money orders issued numbered 7,168, amounting to \$214,307.90. The fees on the international orders came to \$2,402.10. Money-order remittances received from other island offices at Honolulu aggregated in value \$2,639,086.21. The total cash handled at Honolulu on account of money-order business was \$3,755,343.47. For the fiscal year 1917 the total cash handled was \$3,550,320.34.

Perhaps the most important feature relating to money-order business at Honolulu has to do with the amount annually remitted to Japan from Hawaii through this means. During the fiscal year 1917, 43,042 international money orders payable in Japan were purchased in the Hawaiian Islands. They called for a total of \$1,096,038.30. This sum was taken out of Hawaii in cash for the fiscal

year 1917 and remitted to Japan. In the fiscal year 1918 only 35,322 orders payable in Japan were bought in Hawaii, and the amount remitted by island Japanese to their mother country was reduced to \$997,528.93, a decrease of \$198,509.37.

### POPULATION, IMMIGRATION, AND LABOR.

See "Schools" for pupils by races, ages, etc., in public and private schools for different years; "Taxation" for amount of taxable property owned and income taxes paid by different races; "Public lands" for homesteads taken by different races; "Banks" for amounts of savings deposits by different races; "Vital statistics" for births, marriages, and deaths; and "Courts" for percentages of convictions among different races.

The estimated population, including that of the Army and Navy, on June 30, 1918, was 256,180, an increase of 64,271, or 33.49 per cent, since the census of 1910. The estimated population of Honolulu, the capital of the Territory, is 75,000. The following table shows the population by races, as near as can be estimated, as of June 30, 1918.

*Estimated population June 30, 1918.*

Races.	Census, Apr. 15, 1910.	Esti- mated, June 30, 1918.	Races.	Census, Apr. 15, 1910.	Esti- mated, June 30, 1918.
Hawaiian.....	26,041	22,850	Chinese.....	21,674	22,280
Part Hawaiian.....	12,506	16,100	Japanese.....	79,674	106,800
Portuguese.....	23,303	24,250	Filipinos.....		20,470
Spanish.....	1,990	2,270	All others.....	7,964	5,600
Porto Rican.....	4,890	5,200			
Other Caucasian.....	14,867	30,400	Total.....		256,180

*Steorage arrivals and departures and births and deaths, eight fiscal years since census of April, 1910.*

	Hawai- ian.	Part Hawai- ian.	Portu- guese.	Span- ish.	Porto Rican.	Other Caucasian.	Chi- nese.	Jap- anese.	Fili- pino.	All other.	Total.
<b>Arrivals:</b>											
1911.....			601	908		10	533	2,248	2,209	206	6,795
1912.....			862	911	1	270	512	3,600	3,038	743	9,837
1913.....			362	2,422		96	596	5,015	5,749	856	15,093
1914.....			208	25		137	532	4,562	3,199	659	9,343
1915.....			112	24	7	103	355	2,186	1,244	705	5,700
1916.....			180	4		170	563	4,196	1,782	577	7,441
1917.....			159	15		17	471	4,029	2,532	720	8,343
1918.....			35	1		18	306	3,886	2,676	399	7,321
<b>Total.....</b>			2,519	4,310	8	821	3,963	30,615	22,799	4,865	69,895
<b>Births:</b>											
1911.....	592	467	700	73	232	208	423	1,726	27	46	4,494
1912.....	649	626	754	121	219	224	441	2,021	38	52	5,147
1913.....	574	627	841	170	220	255	499	2,230	92	70	5,563
1914.....	596	708	911	235	216	290	548	3,039	154	69	6,766
1915.....	533	786	838	266	176	315	607	4,006	219	116	5,597
1916.....	617	533	946	255	236	323	655	3,062	251	121	7,869
1917.....	597	617	971	199	191	378	630	4,918	346	166	9,365
1918.....	636	992	1,063	161	237	416	696	4,579	456	214	9,204
<b>Total.....</b>	4,783	5,955	7,054	1,480	1,727	2,400	4,512	26,781	1,583	566	87,149
<b>Grand total.....</b>	4,783	5,955	9,578	3,790	1,735	3,230	8,470	57,396	24,382	5,721	137,033

*Steorage arrivals and departures and births and deaths, eight fiscal years since census of April, 1910—Continued.*

	Hawai- ian.	Part Hawai- ian.	Portu- guese.	Span- ish.	Porto Rican.	Other Cau- casian.	Chi- nese.	Jap- anese.	Fili- pino.	All other.	Total.
<b>Departures:</b>											
1911.....			624	.....	232	651	927	3,491	462	399	6,786
1912.....			539	534	13	148	747	3,490	156	729	6,356
1913.....			989	1,079	33	127	813	3,545	344	853	7,783
1914.....			819	754	105	159	728	3,778	693	1,014	8,050
1915.....			469	447	50	171	645	3,449	678	788	6,697
1916.....			474	496	210	10	604	3,068	697	652	6,211
1917.....			367	1,003	41	61	419	3,448	1,130	733	7,202
1918.....			844	838	57	47	389	4,737	1,470	503	8,826
<b>Total.....</b>			5,125	5,151	741	1,374	5,272	29,006	5,630	5,671	57,970
<b>Deaths:</b>											
1911.....	1,010	172	384	39	101	171	253	1,030	66	70	3,296
1912.....	932	200	344	53	91	163	225	942	59	62	3,071
1913.....	941	178	329	70	67	155	230	1,012	178	72	3,223
1914.....	966	202	346	79	79	204	247	1,206	223	65	3,707
1915.....	888	188	303	52	95	162	276	1,301	200	82	3,556
1916.....	942	275	379	79	107	201	274	1,335	223	75	3,940
1917.....	844	239	277	58	57	210	271	1,246	229	67	3,498
1918.....	843	275	331	49	93	227	331	1,363	364	101	4,010
<b>Total.....</b>	7,406	1,729	2,693	472	690	1,493	2,107	9,575	1,551	594	28,310
<b>Grand total.....</b>	7,406	1,729	7,818	5,623	1,431	2,867	7,379	38,581	7,181	6,265	86,280
<b>Net gain.....</b>		4,226	1,755	167	304	363	1,091	18,815	17,201		43,522
<b>Net loss.....</b>	2,623									544	

*Steorage arrivals and departures for the year ended June 30, 1918.*

	Arrivals.								
	Coast.			Orient.			Total.		
	Men.	Women.	Child- ren.	Men.	Women.	Child- ren.	Men.	Women.	Child- ren.
Chinese.....	15	2	1	236	29	23	251	31	24
Japanese.....	47	3	6	1,629	1,966	235	1,676	1,969	241
Filipinos.....	2	4	1	2,077	278	314	2,079	282	315
Hindus.....				1			1		
Koreans.....	2			1	5		3	5	
Portuguese.....	25	7	3				25	7	3
Spanish.....	1						1		
Russians.....	1	2	2	2	8	3	3	10	5
All others.....	267	44	24	57	7	1	314	51	25
<b>Total.....</b>	350	62	37	4,003	2,293	576	4,353	2,356	613

	Departures.									
	Coast.			Orient.			Total.			Increase (+) or de- crease (-).
	Men.	Women.	Child- ren.	Men.	Women.	Child- ren.	Men.	Women.	Child- ren.	
Chinese.....	13		347	12	17	360	12	17	-109	19
Japanese.....	58		2,281	578	1,514	2,339	883	1,515	-653	1,086
Filipinos.....	441	5	857	62	95	1,298	66	106	781	-1,274
Hindus.....	2						4		-3	209
Koreans.....	10		2				14			
Porto Ricans.....	24	13	4			26	13	18	-25	18
Portuguese.....	286	183	347	12	14	298	197	349	-273	346
Spanish.....	266	168	367	15	18	4	186	371	-260	371
Russians.....	22	9	13	1	1	23	10	14	-20	9
All others.....	304	63	54	35	14	339	77	69	-25	44
<b>Total....</b>	1,426	445	3,556	999	1,648	4,982	1,444	2,450	-629	911

## PUBLIC LANDS.

The following table shows the total area of Government lands and their estimated valuation as of June 30, 1918:

*Public lands of the Territory of Hawaii as of June 30, 1918.*

Classification.	Area.	Total area.	Estimated valuation.	Total valuation.
	<i>Acres.</i>	<i>Acres.</i>		
Agricultural lands.....		48,849.40		\$3,914,184.35
Cane lands.....	29,659.19		\$3,337,515.25	
Other agricultural lands.....	17,531.98		409,275.10	
Rice and taro lands.....	1,299.39		163,860.00	
Fish ponds, etc.....	358.84		3,534.00	
Net homestead area.....		32,047.99		844,187.46
Homesteads sold, amount unpaid.....	17,080.06		401,856.66	
Homesteads opened, untaken.....	12,478.75		282,178.55	
Homesteads surveyed, not opened.....	2,489.18		160,152.25	
Homesteads, exchanges and reserves.....		1,887.62		108,378.00
Pastoral lands (not cultivable).....		484,383.60		1,352,688.60
Total saleable lands and valuation.....		567,168.61		6,219,438.41
Total forest lands.....		566,754.34		2,759,881.08
Forest lands.....	215,085.35			
Forest reserves.....	351,668.99			
Total area of lands of value.....		1,133,922.95		
Waste lands absolutely of no value.....		507,950.69		
Total public lands.....		1,641,873.64		8,979,319.44

## HOMESTEADS.

There were taken up during the year 315 homesteads, covering an area of 6,464.183 acres, at valuations aggregating \$243,979.60, or \$36.11 per acre, on the average. The homesteads taken averaged 20.521 acres each. They were taken by different nationalities, as follows: Hawaiians, 106; Portuguese, 99; Americans, 19; and others, 22. To enable homesteaders to obtain homesteads of suitable size for their needs, they are given the option of taking one or two or, in some cases, three lots. There were taken under special homestead agreements 236, under certificates of occupation 2, under right-of-purchase leases 60, under cash freehold agreements 10, homestead leases 7, and special sales agreements 180.

During the year 29 homesteads were surrendered or forfeited, covering an area of 849.71 acres. During the same period 55 transfers of homestead lots were made, having an area of 4,329.296 acres.

A total of 41 planting agreements, representing 779.59 acres, were signed. During the year there were sold at auction for cash 44 lots, including residence, church, and business site lots, containing a total area of 35.607 acres, for \$145,187.10. A total of 29 general leases, covering 102,454.803 acres, were sold at an aggregate annual rental of \$20,714.50.

## LEASES, LICENSES, TRANSFERS, EXCHANGES, AND PURCHASES FOR PUBLIC PURPOSES.

Land and water licenses, 21 in number, were issued during the year, giving a total annual rental of \$15,748.

Public lands in the Territory may be transferred from the Territory for the uses and purposes of the United States by order of the President.



The Territorial public lands are under the Territorial land department unless transferred by order of the governor for special public purposes. The following transfers were made during the year in the form of executive orders by the governor:

July 3, 1917: For the use of the county of Hawaii as a stable site, 0.459 acre.

August 24, 1917: For school purposes under the control and management of the board of supervisors of the county of Hawaii, 1.80 acres.

January 31, 1918: Withdrawing certain land at Kapaa, Kauai, from the operation of executive order No. 30, setting the same apart for the purpose of establishing thereon a county farm and sanitorium.

January 31, 1918: For an addition to the Kapaa school lot, Kapaa, Kauai, 3.39 acres.

April 1, 1918: For a public park and playground at Waiakea-kai, South Hilo, Hawaii. 1.16 acres.

April 25, 1918: For a public park at Lahaina, Maui, 7.67 acres.

April 25, 1918: For a public park at Waiimea, Kauai, the same to be under the jurisdiction of the board of supervisors of the county of Kauai, 0.51 acre.

April 25, 1918: For a public park at Lahaina, Maui, 7.67 acres.

*Patents and commutations.*—There were issued during the year 199 patents, covering an area of 2,873.512 acres, for considerations aggregating \$269,849.49, or at the rate of \$9.39 per acre. Of these, 52 were right-of-purchase leases, 17 land exchange, 85 time payments, 2 cash freehold agreements, 26 cash purchases, 16 preference rights, 1 compromise with abutting owner, 1 homestead under acts of 1892 and 1895.

There were also issued 2 patents based on land-commission awards upon payment of commutation, the area being 7.073 acres and the commutation \$21.50.

*Revenues and disbursements.* The total receipts of the land department were \$575,015.21, as compared with \$375,126.94 for the preceding year. Expenditures were \$32,640.01.

*Receipts of public lands department for the year ended June 30, 1918.*

<b>Rents:</b>		
General leases .....	\$281, 797. 27	
Right of purchase leases .....	6, 870. 82	
Kaimu leases .....	5. 00	
		<b>\$288, 673. 09</b>
<b>Interest and fees:</b>		
Special homestead agreements .....	5, 808. 60	
Special sale agreements .....	1, 025. 33	
Cash freehold agreements .....	19. 56	
Interest on commutation .....	4. 70	
Office fees .....	425. 50	
		<b>7, 283. 69</b>
<b>Land sales:</b>		
Special homestead agreements .....	47, 850. 47	
Special sale agreements .....	12, 968. 34	
Right of purchase leases .....	13, 556. 21	
Cash freehold agreements .....	358. 74	
Preference rights .....	10, 267. 25	
Cash sales .....	186, 689. 00	
Government commutations .....	336. 00	
		<b>272, 026. 01</b>
<b>Improvements on lands .....</b>	<b>2, 457. 82</b>	
<b>Government realizations .....</b>	<b>4, 574. 60</b>	
<b>Total .....</b>		<b>575, 015. 21</b>

## NATIONAL PARKS.

All of the private lands in the Mauna Loa Park area have been acquired by the Government. The trail from Kilauea to the Mauna Loa Park is being constructed by the Volcano Research Association, and there will probably be no difficulty in acquiring it if desired by the Government. No difficulty is anticipated in securing private lands in the Haleakala Park area, provided certain shooting privileges are allowed to keep the wild goats within the crater from climbing out and descending into the cane fields on the outer slopes. A bill is now in Congress to authorize the Territory to exchange lands with the estate now owning land within the area. B. G. Rivenburgh, commissioner of public lands for the Territory, is special agent for the National Park Service to attend to national park matters in the Territory.

## SURVEY DEPARTMENT.

The work of this department remains much the same as for the preceding year. Several homestead subdivisions have been completed, many surveys of a miscellaneous nature have been made in connection with public land transactions, and tracings, blue prints, and other data furnished. The tax assessors are frequently given copies of maps that tend to assist them in their effort to levy fair assessments.

### FIELD WORK.

#### ISLAND OF KAUAL.

*Waimea.*—A detail survey of the village or town lots near the shore and remnants situate in the valley was started in August, 1917, and after establishing the boundaries of something over 150 privately owned parcels of land it left remnants of value in the title of the Government which aggregated 207 acres, approximately. The area within what is known as the "Waimea town or village" was subdivided into 61 lots, while the remnants in the valley number 72. This is the first detailed survey made of the section; and as complete data was not available, quite a number of original title papers not having been recorded, some of the locations had to be adjusted a second or third time, as more complete information was obtained from the few remaining old residents living in that vicinity. This caused some unexpected delays, but there was some satisfaction in assisting the humble citizens in establishing the location of their house lots and advising them of the importance of recording the deeds they had received from Kamehameha III and Kamehameha IV in order to perfect their titles.

*Waimea upper boundary.*—A boundary study was made of the Upper Waimea lands, and the lines in dispute, between the representatives of Messrs. Gay and Robinson and the estate of V. Knudsen, the original lessees, were established.

*Wailua.*—The subdivision of this tract into homestead lots, district of Puna, showed an area of 1,261.4 acres. The survey, which was commenced in May, 1918, was completed just before the close of the period.

*Hanapepe*.—The detail survey of this land was started immediately after the completion of the Waimea detail survey, and will include an area of approximately 1,400 acres, classed as cane, wet, and kula land.

*Kokee Camps*.—A small area of Government land in the vicinity of Halemanu, and within what is known as the "Na Pali-Kona Forest Reserve," district of Waimea, has been surveyed and staked out into 47 camp sites or summer lots, each having from one-fourth of an acre to 2 acres in area. Owing to the high elevation and climatic conditions, it is an ideal spot for camping during the summer.

*Puu Ka Pele Forest Reserve*.—The proposed addition to the Na Pali-Kona Forest Reserve, in the region of Puu Ka Pele, was marked out and flagged. It contains an area of 4,900 acres, more or less.

#### ISLAND OF OAHU.

A number of minor surveys were made.

#### ISLAND OF MAUI.

The only field work done on this island, during the fiscal period, was the checking of two land-court petitions, one at Lahaina, and one at Omaopio.

#### ISLAND OF MOLOKAI.

At the request of the land commissioner, an inspection on the ground was made of 25,500 acres of land, situate on the west end of this island, a portion of which is classified as pasture and marsh land, while the remainder is rather thickly covered with algaroba trees. This classification was made in order that the land board would be able to determine new rental values in offering the public lands for lease.

#### ISLAND OF HAWAII.

*Waiakea*.—The subdivision of a portion of Waiakea cane fields into homestead and house lots, approximately 2,000 acres in area, was well advanced at the end of the period.

*Waikaumalo-Maulua*.—In order to conform with the amended land laws, relating to the disposition of Government land containing not more than 80 acres in area, it was necessary to subdivide three homestead lots in this tract, district of North Hilo.

#### OFFICE WORK.

Considerable office work is done in connection with the field work; that is, preparing data, computation, mapping, plotting, compiling descriptions of surveys, besides the regular routine work of furnishing data, descriptions of surveys, tracings, blue prints, and indexing the records, as well as accommodating the general public when they call to consult maps and records of the department.

#### BUREAU OF AGRICULTURE AND FORESTRY.

*Forestry*.—Toward conserving an adequate and steady supply of water for these islands where the main industries largely depend upon water for irrigation, the division of forestry has continued actively to protect the forest and extend them.

During the year new fences on established forest-reserve boundaries to keep stock from injuring the native forest have been constructed and existing fences repaired.

On the several islands the six forest rangers have rendered efficient service. The elimination of wild cattle from the reserves has been pressed, and in one forest region alone on Hawaii 30 head of wild cattle have been eradicated by shooting and roping.

The Territory has been very fortunate during the year in the matter of forest fires, in spite of a very dry summer. Only three unimportant fires were reported.

The work of extending the forest-reserve system has progressed by creating three new reserves and adding to the area of an existing reserve. The whole island of Kahoolawe, consisting of 28,260 acres of nonwater-producing land, was also withdrawn from the forest reserve so as to return it to the jurisdiction of the land commissioner who by law is in the only position to issue a license whereby the destructive goats on the island can be removed and the feed thereon utilized for fattening cattle for the market. The new reserves consisted of the Papapaholahola Spring on Kauai of 54 acres, the Waiahole on Oahu of 1,169 acres, and the Keauohana on Hawaii of 272 acres, and 263 acres were added to the Makawao Reserve on Maui. This brings the total number of forest reserves in the Territory up to 42, with a total area of 773,591 acres, of which 521,557 acres, or 69 per cent, is Government land.

Tree planting has progressed at the usual satisfactory rate and especial attention has been given to reforestation on water-producing areas.

Under special authority granted by the last legislature a campaign for the protection of bird, animal, and vegetable life on the small islands off the windward coast of Oahu was begun. Trespass signs have been placed on the islands and to date 22 trespassers have been arrested and convicted.

*Plant inspection.*—The work performed during the past fiscal year consisted of the following:

1. The inspection of all fruits, vegetables, and plants coming into the Territory from foreign countries and the mainland of the United States to prevent the introduction of pests and plant diseases.

2. The inspection of all fruits, vegetables, and plants going from Honolulu to the ports of all other islands for the purpose of preventing the spread of any pest existing on Oahu.

The division of plant inspection was transferred to the new quarters on Kekuanaoa Street about January 1, 1918. All plant importations are now brought to the new building immediately upon their arrival in the Territory, thus doing away with the old method of opening these shipments on the various docks. The equipment is now such that the danger of introducing new pests has been reduced to a minimum.

The inspection of horticultural produce leaving Honolulu for ports on the other islands has been continued on similar lines to those of last year.

*Entomology.*—No new work in the way of exploring for and introducing beneficial insects has been undertaken since the organization of the division on July 1, 1917, as it is believed that the disturbed conditions caused by the war are unfavorable to the prosecu-

tion of such work. The beneficial insects previously introduced—including the fruit fly, melon fly, dung fly, and corn-leaf hopper parasites—have been propagated and distributed without interruption, although there is no question about their establishment in the islands.

The distribution of the different parasites during the year was: Fruit fly, 13,505; melon fly, 16,288; dung fly, 5,570; corn-leaf hopper, 264,800; or a total of 300,163.

It is gratifying to have confirmation of the increasing effectiveness of the fruit-fly parasites in the investigations of the United States Bureau of Entomology office in Hawaii, and the exceptionally large corn crop of this year testifies to the effectiveness of the leaf-hopper control when managed by progressive farmers. An introduction of 1917, a wasp brought from the Philippines to prey upon cockroaches, has become established in the islands.

*Animal industry.*—The rules and regulations covering the importation of live stock have proven effective in preventing the introduction of the many animal scourges which are causing enormous animal losses in other parts of the world.

Live-stock importations have practically been confined to purebred registered animals of the different classes for the continued improvement of the herds here. That considerable has been accomplished in this direction is evidenced by the fact that the Territory is now self-supporting as far as beef and pork is concerned and will soon become so as regards mutton. This improvement was further demonstrated by the unusually large and high-class exhibits of imported and island-bred animals of all classes at the recent Territorial fair.

Glanders has been entirely eradicated; *epizootic lymphangitis*, of which a small outbreak occurred on the island of Hawaii, is under complete control; tuberculosis has been reduced from 31.25 per cent to 2 per cent, and with the great help of the compensation law, which became effective last April, the complete eradication of this disease is now in sight; anthrax, which made its appearance last year on Kauai and was rapidly followed by one outbreak on Oahu and seven distinct outbreaks on Maui, is now under complete control. Total eradication has been accomplished on the islands of Oahu and Maui.

*Marketing division.*—The past year has been the most successful in the history of the division. Twenty-two hundred and thirty-nine consignments of different kinds of island products were received and sold for \$172,391.76, an increase of \$50,878.86 over last year's sales, which were \$54,534.96 greater than the sales for 1915-16.

The bean crop last year was the largest the islands have produced. Most of these beans were marketed through the division at very satisfactory prices. As the Honolulu market was stocked with beans, most of the red beans were shipped to the coast.

On the first of the year bananas were very plentiful in Honolulu, due to the shortage of shipping space, and the planters were losing hundreds of large bunches in the fields. In order to assist the producers, the division cooperated with the banana consuming propaganda committee of the Hawaiian Vigilance Corps in creating a local demand for all bananas which could not be shipped to the coast. The campaign proved successful, but in a short time more shipping space was available and the larger number of bunches shipped

to the coast left very few bananas for the newly created demand in Honolulu.

The retail meat and vegetable departments were discontinued on November 30, 1917, with the permission of the board of agriculture and forestry, under whose jurisdiction the division has been operated during the past fiscal year.

At the special session of the legislature early in 1918 provision was made to transfer the division to a new Territorial marketing commission to be appointed by the governor, the above transfer to take place on July 1, 1918.

## HAWAII AGRICULTURAL EXPERIMENT STATION.

The continued food shortage throughout the world has revealed more clearly than ever during the past year the great dependence of the island population on imported food products. Any interruption of shipping under such conditions immediately precipitates a disorganization in the distribution of food products. This has served to emphasize more and more the need of a greater production of locally grown food products. What the islands need perhaps more than anything else in an economic way is the development of diversified industries which will provide a surplus of edible manufactured products which can serve as articles of export during normal times and which in times of dire necessity can be readily utilized to feed the local population. It is recognized that in ordinary times it is impossible for a number of the food crops to be successfully raised in competition with similar mainland crops which can be brought to Honolulu at a price considerably below the cost of local production.

*Emergency war gardens.*—Throughout the year a great deal of attention has been given to the development of the war garden idea among those who became interested in doing something practical along food production lines. The station has continued to allot small plots of otherwise waste lands to its laborers for the purpose of enabling them to maintain demonstration war gardens to serve not only as a source of foodstuffs, but also to serve as object lessons to the inquiring public, several of these gardens being located immediately in front of the station buildings.

*Cooperation with military posts.*—The military posts have continued through the broad policy of the commanding officers to contribute materially to the available food supply of the island through their system of company gardens. The United States Experiment Station has acted in an advisory capacity along food production lines. At a number of the posts as much as an acre has been assigned to a company and special details made for each company garden. These details ordinarily consist of individuals who have had special experience in market gardening and who are naturally enthusiastic in the work.

*Cooperation with private growers.*—Considerable attention has been given during the year to the development and furthering of cooperative relationships between the station and numerous private growers and concerns throughout the territory. In these arrangements the station provides the plan for some experiment or demonstration which promises to give valuable information to the section

in question. The necessary seed is usually furnished by the station while the individual furnishes the land and labor.

*Territorial fair.*—Held primarily for the purpose of stimulating food production and food conservation, the Territorial fair was one of the most successful enterprises that has ever been launched in the islands. The result of the food production propaganda work of the past few years was demonstrated by the wide range of food crops placed on exhibit by the growers representing nearly a dozen different nationalities. The cooperation of the military authorities in the way of equipment, organization, and program events contributed very materially to the success of the undertaking. All the agricultural institutions of the islands presented practical exhibits of their work, looking either to the increased production of the local food supply or to its conservation.

One feature of no little interest was the daily exhibition of foods of the various nationalities, especially by the Japanese, Chinese, and Hawaiians who demonstrated such of their foods as they considered best adapted to be used as substitutes for wheat and other imported articles of diet.

Another very gratifying source of exhibits were those entered by a number of the sugar plantations, showing the progress made looking to the putting of the said plantations on a self-supporting basis as regards the food supply for their laborers and the feed supply for their work animals. One of the largest plantations presented evidence to show that it has been able to produce practically all the concentrate and roughage feed required by the thousand or more work animals in use on its properties. Another plantation company showed an interesting exhibit demonstrating the possibility of the production of a form of alcohol from waste cane molasses for use as a substitute for gasoline. The same company has also through its diversified industries developed a corn-meal grinding plant, a small model of which was in operation at the fair.

*Horticultural investigations.*—The principal lines of work of the horticultural division have been concerned with the increased utilization of the banana, papaya, and tomato as food crops, especially promising varieties of which have been distributed as rapidly as propagating material could be made available. The division has continued to give every possible support to the school and home garden propaganda work which has been very actively under way throughout the year.

One of the most promising lines of work has been a comprehensive test of numerous varieties of beans to determine the best not only for use as fresh string beans but also for use in commercial canning by the pineapple companies, which necessarily are not in active operation during a considerable portion of the year when pineapples are not in season.

An interesting experiment has been continued, looking to the development of a tomato resistant to the melon fly. Several hybrids between the normal size and various small-sized tomatoes have proved of good quality and sufficiently resistant to the fly to make a very welcome addition to the food supply of the islands.

*Extension work.*—A most important advance in the extension work of the islands was the appointment of a number of county agents by the Territorial food commission shortly after the outbreak of the

war. These agents were provided with automobiles and other means of transportation and have been most effective in bringing home to the producing public the best agricultural practices which have been worked out in the islands. It has been found that numerous isolated farmers have developed practical ideas which are with profit being adopted by the other farmers throughout the islands through the good offices of the county agents, who serve as a means of communication between the isolated farmers, thus enabling such valuable ideas to be exchanged.

*Plant-disease investigations.*—The rapid development of home and school gardens, together with the increased acreage planted to food crops, which has been produced on a large scale, has caused a material increase in the prevalence of various diseases and insect pests. These difficulties have been met as rapidly as possible through the determination of the most practical means of combating these various troubles. Probably the most serious disease which has developed during the year has been that designated as banana freckle or black-spot disease. This has continued to spread rapidly from the valley in which it was first discovered until at the present time it seriously threatens the entire banana industry. The major portion of the pathologist's time during the coming year will probably be spent in the attempt to formulate a practical means of arresting the spread of this disease.

Another serious trouble has been the taro rot, which has caused material losses to many of the taro growers of the islands. Through the cooperation of one of the largest land-holding companies of the islands cooperative experiments have been inaugurated looking to the development of practical means of controlling this disease.

The Irish potato continues to be affected by a number of troubles, including the late blight, early blight, mite disease, and the potato tuber moth. Practical methods for control of most of these various troubles have been worked out, and marked increases in yields have been repeatedly obtained by growers where the recommendations of the station were carried out as indicated.

Field and laboratory observations have revealed the presence of numerous miscellaneous fungous diseases and insect enemies of a great number of the economic plants, especially food crops.

*Agronomic investigations.*—The agronomic work has been directed chiefly along the lines of the production of forage and feed crops for animals and food crops for man. The corn investigations have shown the variety introduced from Guam to be very resistant to the attacks of the corn leaf hopper and to give much higher yields than were obtained from any of the strains received from the mainland.

The work with the edible canna has been most promising, yields at the rate of over 40 tons of tubers per acre having been obtained eight and a half months after planting. The station has made numerous distributions of tubers to private parties, who have planted them for the purpose of utilizing them as temporary ornamental plants in their yards and to serve as an emergency source of food supply in case of necessity.

*Glenwood substation.*—The policy of the Glenwood substation has been changed somewhat during the past year as compared with that of previous years. Upon the recommendation of the experiment station the Hilo Board of Trade appointed a Glenwood substation



committee to keep in touch with the needs and activities of the substation and to serve as an intermediary between various interests, agricultural and otherwise, on the island of Hawaii and the Glenwood substation. The agricultural problems of the section in question are difficult and numerous, and the methods of approach are not always clearly indicated. The combined judgments of those having the policies of the substation practically in hand, combined with the counsel afforded by the board of trade committee, have done much to enable the station to carry on its work with a very satisfactory local support.

In addition to the experimental and demonstration work under way at the substation, the superintendent has spent two days of each week doing county agent work in the district surrounding the substation for about 20 miles in each direction. He has also kept in touch with the work being done by the territorial county agents in the other sections of the island.

*Publications.*—Much of the information acquired by the station has demanded an immediate presentation to the public. In this work it is a pleasure to record the hearty cooperation which has been accorded by the newspapers throughout the islands in publishing the various articles submitted by the station's staff.

The following publications have been issued during the year:

Annual Report for 1917.

Station Bulletin 44, The Litchi in Hawaii.

Press Bulletin 53, Composition and Digestibility of Feeding Stuffs Grown in Hawaii.

Extension Bulletin 3, Emergency Series, I. Field of Production of Beans.

Extension Bulletin 4, Emergency Series, II. Methods of Combating Garden Pests.

Extension Bulletin 5, Emergency Series, III. Peanuts—How to Grow and Use Them.

Extension Bulletin 6, Emergency Series, IV. The Banana as an Emergency Food Crop.

Extension Bulletin 7, Emergency Series, V. Drying as a Method of Food Preservation in Hawaii.

Extension Bulletin 8, Emergency Series, VI. Bean Spot Disease.

## PUBLIC WORKS.

### OAHU.

*Improvements, judiciary grounds.*—The legislature of 1917 appropriated \$2,500 for improvements to the judiciary grounds, but this was found to be inadequate and an additional \$2,500 was appropriated at the special session of 1918, making a total of \$5,000 for this project. It is the intention to rearrange the drives around the buildings, change the course of drive on seaward side of the judiciary building, reset existing curbing, paving, and sidewalks, and in general to improve and beautify the grounds.

*New buildings for board of agriculture and forestry.*—The department of public works has completed two buildings for the board of agriculture and forestry on Kekuanaoa Street, adjoining the Davies warehouse. The main structure houses the laboratories and offices, and the structure at the rear is divided into fumigating rooms, garage, and incinerator. These buildings are of a permanent type of reinforced concrete construction and are modern in every respect.

*Normal Training School.*—The new \$30,000 building for the Normal Training School is a two-story concrete and frame structure, the outside walls being of reinforced concrete.

*Territorial powder magazines.*—Owing to the close proximity of the present Territorial powder magazine to the mobilization camp and Army post at Fort Armstrong, and other destructible property in case of an accidental explosion, the Federal Government has granted the Territory the use of a portion of Sand Island for the storage of high explosives, and three buildings have been constructed on this site.

*Moving Davies warehouse.*—The Davies warehouse, formerly situated at the corner of Kilauea and Halekauwila Streets, was moved a distance of about 100 feet, to Kekuanaoa Street, and is now occupied. The reason for the change in location of this building was to provide for the extension of Bishop Street seaward to Allen Street and the water front.

The structure is of brick, 100 feet long, 50 feet wide, and about 34 feet high. The total weight of the building is about 1,400 tons. This building was successfully moved on rollers to the new location without in any way injuring the walls or interior.

*New Territorial penitentiary.*—The new Territorial penitentiary, Kalihi-kai, Oahu, is now practically completed and has been occupied since April of this year.

*Waikiki reclamation.*—The legislature of 1917, act 231, provided for the appointment by the governor of a commission composed of the superintendent of public works, the city and county engineer, the commissioner of public lands, and two others, this commission to be charged with the preparation of a comprehensive reclamation scheme for the Waikiki lands. This act also appropriated the sum of \$20,000, or as much thereof as was necessary to defray the expenses incurred by the commission in making requisite surveys and preparing plans and specifications and securing other essential data for the project.

During the special session of the legislature, 1918, the sum of \$100,000 was appropriated for the furtherance of this project in order that the reclamation work might be commenced without delay. Consequently, upon the formal adoption of an approved scheme and the completion of plans and profiles, actual work is expected to be proceeded with at once.

Abstracts of titles of about one-half of the properties within this area have been acquired by the Territory. In this project, as in no other undertaken by the Territory in recent years, the department of public works, the United States Government, and the city and county combined, are proceeding with an undertaking of inestimable value to the people of Honolulu in reclaiming a most insanitary and unsightly portion of the city.

#### MAUI.

*Reclamation of Lahaina swamps.*—During the period June 30, 1917, to June 30, 1918, there has been only one improvement project of any importance carried out under the supervision of the department of public works on this island. This project, known as the reclamation government swamp lands, Lahaina, Maui, consisted of

the construction of drainage canals and storm sewers designed to care for all storm and ground water, and of placing and grading the quantities of fill materials required to reclaim and place in a sanitary condition 11½ acres of swamp lands located in the town of Lahaina. The project was completed in December, 1917. The reclaimed land has been set aside as a public park and playground for the town of Lahaina.

#### KAUAI.

*Waimea River embankment.*—The 1917 legislature, act No. 185, provided, with certain qualifying restrictions, for the expenditure of not to exceed \$50,000 to defray the cost of continuing construction on the Waimea River embankment.

This project, which provides for the completion of flood protection for the lands adjacent to this section of the Waimea River, is of much importance to this district on Kauai.

Preliminary work on this project, consisting of field engineering, property surveys and descriptions, plans and specifications, has been completed and the cost defrayed from funds remaining from the 1915-1917 appropriations of \$15,000. All data required as a preliminary to the sale of the lands are now on file in the office of the superintendent of public works.

#### BOARD OF HARBOR COMMISSIONERS.

*Pier No. 2, Honolulu.*—The status of the Pier 2 project, described in the Annual Report of 1917, is practically the same as at the time that report was written. The 1917 legislature authorized a sale of bonds, under the loan-fund act, which would have provided funds for this work. Due to conditions brought about by the war it has not, however, been deemed advisable to date to place these bonds on sale, and consequently only work of a preliminary nature, involving minor expenditures, has been performed.

*Pier No. 6, Honolulu.*—General maintenance and repair work on this pier during the 1917-18 period has consisted mainly of repairs to roof and roof drainage, minor repairs to cargo doors and deck planking.

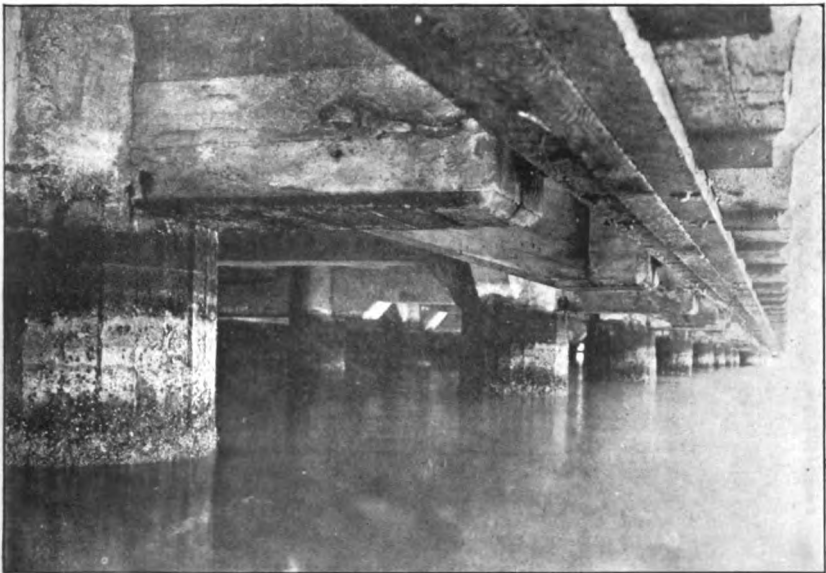
*Piers 8, 9, and 10, Honolulu.*—This project, one of the most important ever handled by the Territorial board of harbor commissioners, both from a commercial and financial standpoint, and one of the largest water-front terminal projects in the Pacific, has recently been completed and has for some time past been utilized for the berthing of vessels.

The portion of the Honolulu water front now covered by the new piers was originally occupied on the Ewa side by the old Oceanic Pier used for many years by the Oceanic Line vessels for all their Honolulu trade, and was one of the more important trans-Pacific landings. The seaward side was taken up by small slips of various depths and was available for the smaller vessels engaged in inter-island traffic only. The Waikiki side on the slip Ewa of Pier No. 7 was unimproved and was of no commercial value to the Territory.

The water-front improvement covered by this contract consists of three reinforced concrete bulkhead wharves, viz, Pier No. 8, 597 feet



PIER NO. 9, CONTRACT NO. 24, COMPLETE WITH BRUNNIER FENDERS IN PLACE.



SUBSTRUCTURE PIERS NOS. 8, 9, 10. TAKEN JUNE, 1918



clear length, 36 feet 4 inches wide along the Ewa side of the Alakea wharf slip; Pier No. 9, 611 feet clear length, 36 feet 4 inches wide along the channel and parallel with the harbor line; Pier No. 10, 552 feet clear length, 44 feet 4 inches wide, running mauka from Pier No. 9 along the channel and parallel with the harbor line, a total available berthing space of 1,760 linear feet, and a total area of 75,358 square feet serving a general cargo shed area, now under construction in part, of approximately 221,000 square feet. The berthing space along the entire water-front section occupied by these piers is dredged to a depth of 40 feet below datum and will accommodate the largest vessels engaged in the Pacific trade.

*History.*—This project was authorized and financed under the loan-fund act by the Territorial board of harbor commissioners in 1915. Preliminary subaqueous surveys of the site, including test borings, were made, and plans and specifications were prepared by the engineering office of the board in 1915, and the contract was awarded to the Lord-Young Engineering Co., of Honolulu, on October 9, 1915. Active operations began about March 15, 1916, and were continued until December 30, 1916, when the contractor was instructed to cease operations pending the report of a committee of engineers employed to investigate certain construction detail questioned by the contractor. Certain recommendations of this committee and certain suggested changes recommended by the engineering office of the board were incorporated in the contract as an extra under the contract provisions for extras and additions. Work was resumed actively about April 30, 1917, and the contract was satisfactorily completed and final payment made on April 10, 1918.

Following is a statement of cost data which is of very considerable interest:

Contract awarded Lord-Young Engineering Co.....	\$285,000.00
Deducted from Lord-Young Engineering Co. for changes and deduction in constructions.....	\$21,831.33
Actually paid Lord-Young Engineering Co. for work on regular contract.....	\$263,168.67
Paid Lord-Young Engineering Co. for extras and additions to construction under terms of contract.....	\$75,358.06
Total paid contractor for job H. C. 24, complete and as accepted by the Government.....	\$338,526.73
Total cost of all overhead and inspection expenses, including cost of diving crew and pro rata cost of main office.....	\$25,340.05
Percentage of overhead to entire project.....per cent..	7.48+
Cost of plans, specifications, prints, etc.....	\$5,514.06
Percent of plans, specifications, prints, etc., to entire project.....per cent..	1.65+

As an engineering achievement this project has brought forward many problems of interest to engineers engaged in water-front terminal construction.

The structure as originally designed called for cast-in-place cylindrical concrete columns 36 inches in diameter to support the deck and superstructure. These columns were to be cast in caissons driven to satisfactory bearing material; or failing to secure such material, placed over pile clusters designed to carry the necessary loading. Bottoms of caissons were to be sealed with concrete, caissons pumped out, and the concrete for the columns placed in dry forms.

This system was thoroughly tried out at the beginning of construction operations and was found to be impracticable, due to the underlying coral formation. While not absolutely impossible, it was found to be very difficult and extremely expensive to seal and pump out the caissons on account of the hydraulic pressure exerted through the bottom. The underlying coral was not only very uneven, but full of subsurface holes and passages which were almost impossible to close.

In view of these it was considered advisable to change the method of constructing and placing the carrying columns. The "precast cylinder" system was investigated and adopted, the contract being thus modified by mutual consent. This system worked out very satisfactorily and was used for the entire project. Concrete cylinders, with a wall thickness of 4 inches, with lengths from 12 to 42 feet, and diameters of 36 inches in the barrel (with a bell base 72 inches in diameter and approximately 60 inches in length) were cast in a horizontal position, using steel cores and built-up wooden outside forms.

Very extensive experiments were made to secure a suitable mixture for the concrete and the formula 1:2:2½, viz: One part Portland cement, 2 parts crusher sand tempered with about 10 per cent of coral sand, 2½ parts of No. 3 crushed stone, plus 10 per cent by volume of cement of hydrated lime was selected and used throughout. The reinforcement (¾-inch square twisted rods made up on 1½ by ½-inch rings of such diameter that the rods when fabricated came in the exact center of the wall concrete) was secured in place in the forms very carefully, great care being used in placing and tamping the concrete and seeing that it was always of the proper consistency. These cylinders, after curing for 30 days, were moved about freely by rolling on the curing skids and were handled by derrick without any evidence of cracks or failure.

Cylinders varying in weight from 5 to 16 tons were handled and placed from an ordinary floating derrick very economically, and no difficulty was experienced in tremieing the core with an average head of 8 feet on the concrete.

One of the greatest difficulties encountered in this project was the driving in location of the carrying piles for the columns. The specifications required clusters of from four to six piles each, either driven to refusal or to a bearing value of 25 tons based on the Engi-

neering News formula  $P = \frac{2WL}{3+0.1}$ . These pile clusters were required to be driven inside of a circumference in no case exceeding 5 feet in diameter, and in about 30 per cent of the cases they were driven (top of the pile below datum) at a depth of approximately 37 feet. This difficulty was very satisfactorily overcome by driving the piles in a "can," i. e., a metal pipe of sufficient length to allow one end to rest on the bottom and the other end to project above the surface of the water. The can and follower used were both handled by donkey lines run over the driver head and were very efficiently worked by the contractor. Divers were used in placing the toe of the can on location and in inspecting the piles after driving. Notwithstanding all the difficulties encountered, these piles were driven and handled, including overhead, which was high, at an average cost of \$0.19 per linear foot for piles ranging in length from 6 to 30 feet.

Very considerable difficulty was encountered in excavating in the coral ledge where same occurred on cylinder locations. In a very large percentage of cases the underlying coral ledge lay in planes whose surfaces were at an acute angle with the horizontal. This coral was an old formation many feet thick and extremely hard. It was found to be almost impossible to either spud or drill by ordinary methods on account of the almost invariable drifting of the bit. This difficulty was effectively met by the use of the "can," as explained for pile driving. A specially constructed chisel-point steel bit weighing about 2,500 pounds was used for this work. This bit was operated from the pile-driver head sheaves, and, working inside the can, it was possible to locate and hold a hole under almost any condition.

Wharf walls on the inland side of the piers were designed to perform the functions both of retaining the back fill and supporting the deck slab and superstructure. There was very considerable controversy as to the efficiency of the design, but it has satisfactorily filled all requirements.

This wall on piers 8 and 9 has a varying depth below datum of from 10 to 27 feet and extends upward to elevation 7. In designing, shear forces at the bottom are cared for by both timber piles, where piles could be driven, and by bulk-weight friction between the wall and the bearing materials, which consisted mainly of coral sand, black sand, and coral ledge. Where coral ledge occurred steel rail sections were driven for dowels to replace timber piles. Overturning movements acting against the top of the wall were adequately cared for by the portal action of the bent haunches and by anchoring the top of the wall to the paving slab over the fill on the inland side.

The wall as described for Piers No. 8 and No. 9 was placed in water by the Tremie method from a floating plant. All concrete was tremied under a head of concrete sufficient to displace the sea water and to insure against any detrimental action caused by free mixing of sea water. Forms were built on shore or on the floating plant and were placed in sections by diving crews. The results obtained by these methods were economical as to cost and uniformly satisfactory.

Underlying material conditions on Pier No. 10 were found so radically different from those on Piers No. 8 and No. 9 that the design, by mutual consent under the contract, was changed to provide for gravity section walls run dry in cofferdams. These wall sections were in no case carried to exceed 14 feet below datum, and except for the difficulty in sealing the cofferdams over coral formations, no unusual or difficult conditions were encountered.

The deck was designed to carry a live load of 500 pounds per square foot plus the dead load plus the superstructure load. Carrying columns are spaced approximately 20 feet by 15 feet on centers, and the regular type of concrete detail was used throughout. Square twisted bars or their equivalent were used throughout for both slab and beams. Shiplap surfaced one side was called for for all slab forms. Concrete in the deck and deck-framing members was cast in sections, run monolithic in a continuous daylight shift, using a mixture of 1 part cement,  $1\frac{1}{2}$  parts crusher sand +  $\frac{1}{2}$  part coral sand, and  $3\frac{1}{2}$  parts No. 3 crushed stone. The results obtained from this



mixture have proven to be satisfactory. The deck has been loaded to far beyond its designed capacity without showing any signs of failure, and the curing cracks which invariably occur in work of this kind are neither large nor excessive in number.

The plans for this project provided for the "Brunnier patent" hanging spring fenders which are well known and extensively used on Pacific coast wharves. These fenders are especially adapted to wharves of rigid construction, as all shock forces set up by contact with vessels is taken up and cared for by the coiled spring of the fender system. Oil and water lines with valve outlets spaced at convenient intervals for service, and adequate in size to serve vessels at all three piers at one time are provided.

Fireproof freight and passenger sheds having a combined area of 221,000 square feet, provided with automatic fire protection, water-front railway service and cargo-handling equipment, are being designed and a contract with the Lord-Young Engineering Co. (Ltd.), who were also the original contractors, for all water service, roof and subdrainage, shed paving, and superstructure foundations is well under way.

### PUBLIC UTILITIES COMMISSION.

Investigation by the Public Utilities Commission of Hawaii was begun on August 26, 1916, for the purpose of considering passenger tariff No. 2 and freight tariff No. 2 of the Inter-Island Steam Navigation Co. (Ltd.).

This investigation was a general one into the affairs of the company and not merely a hearing on specific complaints. A complete report on this investigation appears in the Fifth Annual Report of the Commission for the year 1917. The commission ordered the Inter-Island Steam Navigation Co. (Ltd.) to reduce all charges for the carriage of passengers and freight to not to exceed the rates and classifications which were in effect on the 1st day of August, 1916, said rates to take effect on or before October 15, 1917.

The order of the commission was also issued requiring the company so to amend its freight tariff that shippers of less-than-quantity lots should in no case pay more than the minimum charge for quantity lots.

The company noted and perfected an appeal from the order of the commission to the supreme court of the Territory of Hawaii, but made no attempt to take advantage of the statutory provisions providing for a stay of the order appealed from. The company failing to obey the order of the commission, the commission obtained an injunction restraining the company from violating the terms of the order.

The supreme court of the Territory of Hawaii reversed the order of the commission on the ground that the commission was without jurisdiction over the rates of the company, exclusive jurisdiction over the rates and charges of the company being in the Shipping Board created under the provisions of act of Congress of September 7, 1916, known as the shipping act.

## INDUSTRIAL ACCIDENT BOARDS.

Under an act entitled the workmen's compensation act, the legislature of 1915 created industrial accident boards for the various counties. This act was amended in 1917, the principal amendment providing that beginning with July 1, 1918, a standard form of accident policy, prepared by the insurance commissioner, should be adopted by the various companies. This standard policy is now in use.

For some months during the early part of the fiscal year work of these boards was halted by a decision handed down by the first judge of the circuit court of the first judicial circuit, who held that the act was unconstitutional. The case wherein ruling was made was carried to the supreme court, which reversed the decision of the lower court, and on December 11, 1917, handed down a decision pronouncing the act constitutional. During the interim a considerable portion of the employers continued to file the usual returns, making careful and adequate adjustment of the various claims as indicated under the act, this voluntary compliance apparently attesting the favorable reception of the act by a large proportion of the business people of the Territory. The reports were informally accepted and filed subject to future consideration upon the advice of the governor, the acting attorney general, and the Territorial auditor.

The Honolulu board received during the fiscal period a total of 2,690 first reports of accidents, 28 of which were fatal and 19 of which resulted in permanent partial disabilities. In a little less than one-half of these accidents reported no compensation was paid beyond the medical bills, these averaging \$10.30 and aggregating \$14,000. During the 12 months an aggregate sum of \$44,233.44 was awarded in compensation for death claims alone. Eighteen permanent partial disabilities were compensated in a sum total of \$9,115.26. These are exclusive of the large number of claims for minor accidents causing disabilities for long or short periods where the injured employee is totally disabled for work.

## LOAN FUNDS.

The governor is empowered by legislative act to appoint a commission for each county and the city and county consisting of the superintendent of public works, the mayor or chairman of the board of supervisors, and three other persons who are residents of the county or city and county in which public improvements are to be performed from funds loaned to the county or city and county by the Territory. Such commissions are known as loan-fund commissions.

During the past year the Kauai Loan-Fund Commission has held no meetings and made no expenditures. No loan-fund appropriation was made for Oahu during the 1917 legislature, and the only work that remains to be done under the 1915 appropriation is to install a sewer pump in Kalihi District, Honolulu, which has already been ordered.

## HAWAII LOAN-FUND COMMISSION.

The legislature of 1917 appropriated \$70,000 for the continuance of the road work at Keamoku, Hawaii, which had been under way for more than a year. Work was continued along the same line as previously by asphaltting the portion of sub-base already laid until January 1, 1918, when it was decided to abandon for a while the macadamizing and asphaltting and to extend the sub-base and filler as rapidly and as far as possible, so as to afford the traveling public a hard and safe road over a long stretch of desert, instead of a short, finely finished road with the remainder in a deplorable condition and absolutely impassable at times. On June 30, 1918, the sub-base was completed a distance of 3.16 miles for the six months. The total road will be 5.21 miles in length, of which 2.05 miles will be asphalt macadam and 3.16 miles will be sub-base and filler.

## MAUI LOAN-FUND COMMISSION.

During the year the commission saw the completion of two contracts, the macadamizing of a portion of the Haiku-Pauwela-Kuiaha-Kaupakalua Roads and the excavation of the Olinda Reservoir. The commission also entered into a contract for the construction of the Olinda Reservoir lining.

## SCHOOLS.

At the end of the fiscal period the number of pupils enrolled in the public schools was 34,343, an increase of 6.4 per cent. The following table shows the percentages of attendance for the last three years:

	June, 1916.	June, 1917.	June, 1918.
Oahu.....	94.7	94.9	94.9
Kauai.....	91.7	95.2	94.0
Hawaii.....	93.9	94.2	92.4
Maul.....	93.0	88.6	90.4
Molokai.....	91.8	94.3	93.0
	93.4	93.4	93.1

*Table of increases for the last five years.*

Year.	Enrollment.	Increase.
		<i>Per cent.</i>
June, 1914.....	26,990	5.3
1915.....	28,827	6.8
1916.....	30,206	4.7
1917.....	32,282	6.9
1918.....	34,343	6.4

*Expenditures for public schools, by fiscal years, since organization of Territorial government.*

Fiscal year.	Schools.	Teachers.	Pupils.	Maintenance.	New build-ings.	Per pupils.	
						Mainte-nance.	Total.
1901.....	140	352	11,501	\$358,925.72	\$8,773.37	\$29.06	\$29.76
1902.....	143	380	13,189	364,374.72	12,121.54	28.12	29.06
1903.....	144	386	13,793	393,502.64	10,411.02	28.62	29.28
1904.....	147	399	14,467	409,048.84	96,513.71	28.27	34.94
1905.....	154	414	15,202	336,358.59	257,387.12	22.12	39.05
1906.....	151	435	16,119	261,458.99	61,270.87	22.42	26.22
1907.....	153	441	17,135	349,933.14	75,168.88	20.41	24.80
1908.....	154	476	18,664	467,555.05	88,832.17	25.18	29.07
1909.....	153	483	19,307	446,832.60	98,075.94	22.90	27.31
1910.....	152	486	19,809	470,176.08	14,410.41	23.56	24.84
1911.....	155	523	20,597	479,351.19	4,243.41	23.27	23.48
1912.....	156	532	21,752	630,334.65	92,577.92	26.53	30.43
1913.....	161	674	25,631	677,799.72	268,741.78	26.44	36.93
1914.....	168	713	26,990	742,310.63	77,208.85	27.50	30.36
1915.....	170	735	28,827	773,146.88	60,441.42	26.79	29.20
1916.....	171	804	30,205	896,501.33	127,271.01	29.78	33.99
1917.....	168	855	32,282	898,047.78	98,209.83	27.81	30.63
1918.....	168	967	34,343	1,079,603.16	173,805.20	31.43	36.49
Total.....			10,137,351.71		1,615,565.50		

## SUMMARY.

	Schools.	Teachers.			Pupils.		
		Male.	Female.	Total.	Male.	Female.	Total.
Public schools.....	168	144	823	967	19,248	16,005	34,343
Private schools.....	57	81	249	330	3,953	3,348	7,301
Total.....	225	225	1,072	1,297	22,201	19,443	41,644

*Comparative table by nationality of pupils attending all schools in the Territory, June 30, 1918.*

Nationality.	Public.	Private. <sup>1</sup>	Total.
Hawaiian.....	2,216	689	2,905
Part-Hawaiian.....	2,905	1,384	4,289
American.....	849	1,024	1,873
British.....	108	74	182
German.....	126	71	197
Portuguese.....	5,001	1,290	6,291
Japanese.....	15,101	1,315	16,416
Chinese.....	3,806	1,139	4,945
Porto Rican.....	1,032	68	1,100
Korean.....	409	131	540
Spanish.....	489	49	538
Russian.....	125	30	155
Filipino.....	626	72	698
Other foreigners.....	151	45	196
Total.....	34,343	7,301	41,644

<sup>1</sup> December, 1917, latest report

*Percentage of enrollment by nationality, June 30, 1918.*

Nationalities.	Percentage of enrollment, all schools, June 30, 1918.			Percentage of enrollment, public schools.	Increase 1917-18, public schools.		Decrease 1917-18, public schools.	
	Public.	Private.	All.		Number.	Per cent.	Number.	Per cent.
Hawaiian.....	7.72	1.66	9.38	9.34	85	3.64	.....	.....
Part-Hawaiian.....	9.14	3.32	12.46	11.08	279	11.94	.....	.....
American.....	2.04	2.46	4.50	2.47	.....	.....	29	10.55
British.....	.25	.18	.43	.32	11	.47	.....	.....
German.....	.30	.17	.47	.37	.....	.....	61	22.18
Portuguese.....	12.01	2.98	14.94	14.56	257	11.00	.....	.....
Japanese.....	38.26	3.16	39.42	43.97	1,297	55.53	.....	.....
Chinese.....	7.94	2.71	10.65	9.62	243	10.40	.....	.....
Porto Rican.....	2.48	.16	2.64	3.01	.....	.....	11	4.00
Korean.....	.98	.32	1.30	1.19	48	2.05	.....	.....
Spanish.....	1.18	.11	1.29	1.43	.....	.....	174	63.27
Russian.....	.30	.07	.37	.37	15	.65	.....	.....
Filipino.....	1.51	.17	1.68	1.83	92	3.93	.....	.....
Other foreigners.....	.36	.11	.47	.44	9	.39	.....	.....
Total.....	84.47	17.53	100.00	100.00	2,336	100.00	276	100.00

**COLLEGE OF HAWAII.**

Notwithstanding the unsettled conditions resulting from the war, the College of Hawaii continued to make healthful progress. Attendance increased markedly, there being nearly three times as many studying for degrees as in 1914-15.

By nationality the 143 students were classified as follows:

Caucasian.....	97	Hawaiian or Part-Hawaiian.....	6
Chinese.....	23	Korean.....	2
Japanese.....	18	Hindu.....	2

*Summary of students.*

Years.	Regular undergraduates.	Graduate students.	Special students.	Extension students.	Total.	Total working for credits.
1914-15.....	21	3	41	79	144	65
1915-16.....	33	6	66	.....	105	105
1916-17.....	42	2	66	.....	110	110
1917-18.....	59	2	82	.....	143	143

The number of degrees granted in 1918 was twice as great as in any preceding year.

*Nationality of graduates.*

1912:		1916:	
Caucasian.....	3	Chinese-Hawaiian.....	1
Chinese.....	1	Caucasian.....	1
1913:		1917: Caucasian.....	3
Caucasian.....	4	1918:	
Japanese.....	1	Hawaiian.....	1
1914: Caucasian.....	4	Caucasian.....	1
1915:		Chinese.....	6
Caucasian.....	1	Korean.....	1
Japanese.....	2	Japanese.....	1

A number of enlisted men from local army posts have taken technical courses during the year to assist them in examinations for commissions.

The campus has been noticeably improved and beautified by the extension of the lawns and by the growth of the many tropical and subtropical trees, shrubs, and climbers. The tillable land of the farm has been increased by the clearing of some 11 acres, which will be planted to forage crops and experimental crops.

*Territorial appropriations, July 1, 1917, to June 30, 1918.*

Appropriation—Maintenance and expenses-----		\$9,500.00
Expenditures-----	\$8,851.44	
Balance June 30, 1918-----	2,648.56	
		9,500.00
Appropriation—Salaries instructors and employees-----		32,500.00
Salaries-----	15,741.54	
Balance June 30, 1918-----	16,758.46	
		32,500.00
Appropriation—Building, grading, and improvements-----		12,000.00
Expenditures-----	11,868.39	
Balance June 30, 1918-----	636.61	
		12,000.00

**SPECIAL FUNDS.**

Receipts:		
Balance forwarded-----	8.71	
Sundries-----	5,130.89	
		5,139.60
Expenditures:		
Sundries-----	4,996.72	
Balance forwarded-----	142.88	
		5,139.60

**FEDERAL FUNDS.**

Receipts:		
Balance forwarded-----	28.47	
Installment for 1917-18-----	50,000.00	
		50,028.47
Expenditures:		
Sundries-----	50,027.45	
Balance forwarded-----	1.02	
		50,028.47

**INDUSTRIAL SCHOOLS.**

From the special legislature of 1918, \$9,000 was obtained to cover the increased cost of maintenance during the last year and the unexpected increase in the number of juveniles.

There are two industrial schools under the supervision of the board—one for boys situated at Waialea, on the northern shore of the island of Oahu, and one for girls at Moiliili, a suburb of Honolulu. These institutions at present receive and care for all the juvenile delinquents, who are not paroled or put on probation by the juvenile court in Honolulu or the circuit judges of the outside islands, who also sit as juvenile judges. Instruction at these schools is chiefly of a vocational nature, and the children receive a portion of their earnings.

*Boys school.*—The school is ideally located. The grounds consist of about 700 acres of which 550 are tillable, the remainder being mostly pasture land.

The ideal of the school is more than ever to prepare those in its care for a useful life by developing a personal ambition and a positive interest in the life of each.

The institution is on the self-government basis, which has proved an important factor in conduct and morale.

The boys earn their way out of school by a credit system which has been established on a satisfactory basis during the year. Five thousand credits make a boy eligible for parole. Before small boys can be paroled, their parents or relatives must guarantee that the boys will attend school; for older boys positions must be obtained. Boys thus leaving the school must also report regularly to a parole officer.

The school is organized on a military plan. This includes military instruction, gymnasium classes, athletics, lectures, and a military band, which has appeared in public on several occasions during the past year.

The boys are given academic and industrial training. The teaching of agriculture as an ultimate occupation has not been found successful, but farming is carried on sufficiently to supply the needs of the school. The trades department furnishes the most important part of the practical education. The shops and equipment are strictly modern and represent a valuation of more than \$30,000. There is a blacksmith shop, woodworking and electrical plant, and a complete machine shop. Repairs and improvements are made by the boys, and in several instances outside work has been successfully undertaken. A 50,000 gallon concrete reservoir, and a cottage have been completed, the older buildings put in fair repair, and an ice plant installed by the boys themselves.

By the approval of the board 400 acres of land heretofore uncultivated are now being planted in pineapples, and arrangements are under way for the planting of about 50 acres in sugar cane. As much of the cultivation as possible is being done by the boys.

*Girls' school.*—The girls' school is established on the cottage plan, which has proved efficient and satisfactory, giving opportunity to segregate the girls and helping to remove the idea that the school is solely for punishment. Aluminum money is used instead of credits, with which the girls are required to purchase all clothing and incidentals needed at the institution.

Thorough and practical academic and industrial training for each girl is an aim of the school. Branches other than academic now taught are music, domestic science, sewing, tatting, crocheting, knitting, rag-rug weaving, lauhala weaving, mattress making, physical culture, and agriculture. The agricultural classes look after the grounds and gardens. Entries were made at the Territorial Fair from these departments and the girls won 11 prizes.

Much has been accomplished during the year in improving and beautifying the grounds. The playground is well equipped and various games are taught. Entertainments and outings have been given.

Daily devotional exercises are held at the school. There is an active Red Cross unit, and the girls entered into the spirit of conservation and have cheerfully cooperated with the faculty in eliminating wheat and other war necessities from daily use.

There has been a larger number of girls paroled this year than usual, and most of those leaving go to work in the homes of Honolulu.

*Industrial schools. 1917-18.*

	Inmates, June 30, 1917.	Inmates, July 1, 1918.	Admitted during year.	Re- leased.	Released on parole.	Re- turned from parole.	Average number of in- mates.	Cost per inmate per day.	Num- ber of in- struct- ors.
Boys' school.....	162	169	145	18	123	19	174	.84	16
Girls' school.....	95	126	87	36	28	15	121	.66	13
Total.....	257	295	202	54	151	34	295	.....	29

**LIBRARY OF HAWAII.**

Despite many war demands on the leisure time of adults, there has been a slight gain in the use of books, the records showing a large reading of books pertaining to the war and to history and social problems of the countries involved.

Registration now totals 8,197, adults being 56.4 per cent of this number and children 43.6 per cent. The increase in registration over last year was 870, or 11.8 per cent. Home use of books totalled 107,877, which was an increase of 10.3 per cent.

Visitors to the reading rooms numbered 53,780, an increase of 1,219. A decrease in the reference library visitors was noted, which is accounted for by the war demands upon adults, the small number of tourist visitors and the departure from Honolulu of many Army people who were patrons of the library.

Splendid gains were shown in the children's department. In July an arrangement was made with the library at Portland, Oreg., for an exchange of librarians for a number of months. Special stress has been laid on school visiting and the securing of fuller cooperation from teachers.

The islands department has a total of 163 stations, 40 being community libraries, 53 school libraries, and 70 home libraries. The increase of stations in the year was 11. The distribution is as follows: Hawaii, 29; Kauai, 43; Maui, 39; Oahu, 45; Molokai, 6; and Midway, 1. By legislative appropriation for the islands department which became available one year ago, the need of books is being relieved and the beginning of a fine collection has been made.

**ARCHIVES OF HAWAII.**

Calls are made on the office from time to time for the bills as introduced in the legislature, and in most cases the number of the bill is not known, and in some the knowledge of where the bill originated is also lacking, and considerable searching is necessary to locate what is wanted. To remedy this an index has been made of all bills introduced during the sessions of 1915 and 1917.

Work on the revision of the Hawaiian Dictionary has continued during the period; it has progressed as rapidly as consistent with accuracy, and has reached a point where a start can be made on the printer's copy, for which work a very efficient clerk has been engaged. It will be several years before the completed work is published. In the meantime it will be necessary to secure an additional appropriation to carry it on.



A large amount of information, on a variety of subjects, has been furnished the departments and the general public, during the period, and the promptness with which the bureau has been able to do this, in most cases, has been a subject of favorable comment.

The records of the third and fourth circuit courts have been segregated, indexed, and filed, making these documents available for ready reference.

## THE COURTS.

### TERRITORIAL COURTS.

The territorial courts are composed of a supreme court of 3 members; 5 circuit courts, of which 1 has 3 members, who sit separately, and the others 1 member each; and 29 district courts. The supreme court and circuit court judges are appointed by the President and the district magistrates by the governor of the Territory. The circuit courts are the courts of general original jurisdiction. They try criminal, law, equity, probate, and divorce cases. The first circuit court acts also as a court of land registration. The circuit and district courts act also as juvenile courts, the principal juvenile court being presided over by one of the judges of the first circuit court.

The following tables show the cases by courts, classes of cases, and nationality of convicted in criminal cases:

#### *Court statistics, calendar years.*

##### TOTAL CASES IN ALL COURTS.<sup>1</sup>

	1915	1916	1917
Criminal cases.....	12,199	12,131	14,455
Civil cases.....	3,465	3,066	4,525
Total.....	15,664	15,197	18,980
Convictions in criminal cases.....	9,439	9,572	10,305
Percentage of convictions.....	77	77	71

<sup>1</sup> 119 insanity, 824 juvenile court cases not included.

##### CASES CLASSIFIED BY COURTS.

	1915	1916	1917
Supreme court.....	87	83	84
Circuit courts.....	1,745	1,544	2,139
District courts.....	13,832	13,570	16,757
Total.....	15,664	15,197	18,980

##### CASES IN SUPREME COURT.

On appeal, error, or exceptions:			
Law.....	37	26	34
Equity.....	13	15	16
Divorce.....	2	4	3
Probate.....	2	3	9
Criminal.....	11	17	1
Original.....	10	6	2
Miscellaneous.....	12	12	19
Total.....	87	83	84

*Court statistics, calendar years—Continued.*

## CASES IN CIRCUIT COURTS.

	1915	1916	1917
<b>Civil:</b>			
Law.....	438	290	297
Equity.....	103	64	122
Divorce.....	410	407	434
Probate.....	331	341	508
Miscellaneous.....	9	2	8
Total.....	1,291	1,104	1,369
<b>Criminal</b> .....	454	440	770
Grand total.....	1,745	1,544	2,139
Convictions in criminal cases.....	348	288	339
Percentage of convictions.....	76	74	44

## CASES IN DISTRICT COURTS.

	1915	1916	1917
<b>Civil</b> .....	2,098	1,896	3,081
<b>Criminal</b> .....	11,734	11,674	13,676
Total.....	13,832	13,570	16,757
Convictions in criminal cases.....	9,091	9,284	9,966
Percentage of convictions.....	77	79	73

## RACES OF PERSONS CONVICTED.

Races.	Estimated population June 30, 1918.	Number convicted, 1918.	Percentage of population convicted, 1918.
Hawaiian.....	33,950	1,076	2.76
Chinese.....	22,250	1,114	5.00
Japanese.....	106,800	3,408	3.19
White (including Portuguese).....	56,920	1,000	1.75
Others.....	31,200	3,708	11.53
Total.....	256,180	110,301	4.84

<sup>1</sup> Four corporations were convicted for "failure to file annual exhibits" not included in the total of "nationality of persons convicted."

## CONVICTIONS IN CRIMINAL CASES, BY CLASSES OF CASES.

	1915	1916	1917
Offenses against property.....	620	461	492
Offenses against chastity.....	313	422	278
Offenses against the peace.....	1,038	1,045	964
Gambling.....	4,482	5,012	6,010
Liquor selling, etc.....	106	143	97
Drunkenness.....	742	802	661
Homicide.....	17	113	113
Miscellaneous.....	2,122	1,674	1,800
Total.....	9,439	9,572	10,305

<sup>1</sup> Homicide, 1916, manslaughter, 2; murder, 11. Homicide, 1917, manslaughter, 2; murder, 11.

## JUVENILE COURT.

The principal court handling juvenile cases is located in Honolulu, being presided over by one of the circuit judges of the first circuit, who is assigned for that purpose by the Chief Justice of the Supreme Court. The circuit judges of the other circuits, and to a small ex-

tent the district magistrates throughout the Territory, sit as juvenile judges. There are several salaried officers employed in this work besides a number of volunteers.

Dependents are placed in private homes, private institutions and public institutions by the judge of the juvenile court. Delinquents not paroled are committed to either the boys' or girls' industrial schools, where their work and education is of a vocational nature and partially self-sustaining.

The number of cases coming before the juvenile court of Honolulu during the fiscal period were 688. Of these 490 were boys and 198 girls. Of the boys 411 were delinquent and 79 dependent cases. Boys included 137 Hawaiian, 72 Chinese, 42 Japanese, 108 whites, including Portuguese; and 44 of all others; the girls, 62 Hawaiian, 52 Portuguese, 8 Japanese, 12 Chinese, and 37 of all others. Of the delinquents, 272 boys and 44 girls were placed on probation, 74 boys and 16 girls were dismissed, and 65 boys and 22 girls were committed to the industrial schools. Of the dependents, 5 boys and 14 girls were committed to the industrial schools, 42 boys and 62 girls to charitable institutions, 25 boys and 34 girls to private homes, and 5 boys and 7 girls were dismissed.

The charges were as follows: Assault and battery, 35 boys and 3 girls; curfew, 9 boys and 2 girls; disobedience, 33 boys and 24 girls; gambling, 28 boys; idle, 2 boys; larceny and kindred offenses, 136 boys and 5 girls; truancy, 108 boys and 14 girls; and other offenses, 60 boys and 33 girls.

#### LAND COURT.

One of the judges of the first circuit is assigned to land-court cases by the chief justice of the supreme court. During the fiscal year 28 applications were filed, while 44 pending remained at the close of the last fiscal period; 32 decrees were issued, including an area of 3,098,348 acres, while 37 petitions were held pending registration, with an area of 4,003,104 acres. The assessed value of the lands included in titles registered is \$574,343, while the value of that held pending registration is \$248,476.39. The total value of lands included in titles registered and pending registration is \$822,819.39.

Fees were collected to the amount of \$5,159.80, of which \$1,070.88 was for the assurance fund.

#### FEDERAL COURT.

The Federal court located in Hawaii is a United States district court, with the jurisdiction also of a United States circuit court. There are two district judges, a United States district attorney and assistant affiliated with this court.

The civil cases brought in this court during the last fiscal year numbered 67, comprising 31 bankruptcy, 11 admiralty, 2 United States civil, 5 other civil, and 18 habeas corpus cases, as compared with 51 cases for the preceding year, comprising 16 bankruptcy, 12 admiralty, 12 United States civil, 4 other civil, and 7 habeas corpus cases.

Criminal cases numbered 209, as against 51 for the previous year, accounted for as follows: Unlawfully importing, etc., opium, 32; adultery, 3; making or presenting false claims, 2; stealing, etc., on United States reservation, 1; violation of white-slave traffic act, 3; narcotics, 2; illicit distilling, 1; violation of tariff act of October 3, 1913, 2; violation of postal laws, 3; depositing nonmailable matter in post office, 3; selling intoxicating liquors to members of United States Army, 47; impersonating United States officer, 1; espionage, 2; keeping bawdy house, 9; setting fire to vessel of United States, etc., 1; unlawfully wearing uniform of United States Army, 18; gambling on United States reservation, 1; failure to register for draft, 60; conspiracy, 3; transporting intoxicating liquor, 15.

Convictions to the number of 185 were secured in the criminal cases, 8 were acquitted, 4 cases nolle-prossed, and 12 cases are pending.

### ATTORNEY GENERAL'S DEPARTMENT.

The attorney general is the legal adviser of the heads of the departments, the high sheriff, the district magistrates, other public officials in all matters connected with their public duties, and the many Territorial boards. Much of this work consists of drawing up or passing upon forms of contracts and bonds of contractors with the Territory, deeds, licenses, patents, and other documents relating to land transactions, corporation charters, etc. The nature of this work prevents its being reported in detail as it is as broad and varied as the work of the several departments.

During the year the department handled two cases in the United States District Court; 12 in the Supreme Court; 34 in the Circuit Court; 14 in the Tax Appeal Court; 50 in the Land Court; 27 in the District Court of Honolulu, and two in other district courts.

Of these cases, 3 are still pending in the United States District Court, 23 in Circuit Court, 20 in Land Court, and 2 in other district courts than Honolulu. This makes 93 cases finished and 48 cases pending.

### TERRITORIAL PRISON.

This year saw the completion of the new prison and its occupancy.

All felons, all Federal prisoners, both misdemeanants and persons awaiting trial, as well as felons, are retained in the Territorial prison.

The warden of the Territorial prison is also high sheriff of the Territory.

The total of days imprisonment for the twelve months ended June 30, 1918, was 230,251, divided into 226,976 criminal prisoners and 3,275 committals. This makes a daily average of 622 criminal prisoners for the year and 9 committed persons, or a total average of 631. During the preceding year the average was 533 prisoners. The daily average for this year thus shows an increase of 98.

For the year the daily average of sick was 1.58 per cent.

Total expenditures were \$83,910.50, divided into \$55,968.22 for expense and maintenance of prisoners and \$27,945.28 for pay of guards and physicians.

Daily cost of support, maintenance, and custody for each prisoner was 61 cents for the period.

Considerable attention has been given to the sanitary conditions of the prison, and regular examinations of all buildings and cells are made weekly. Food is excellent in both quality and quantity, and answers all requirements for food value and nourishment, according to the work required of the prisoners.

All prisoners are given a preliminary medical examination upon first entering, particular care being used to guard against the bringing of contagious or infectious diseases to persons already in prison.

Six deaths occurred among prisoners during the year. Two died of disease and four were executed according to law.

The 1917 legislature enacted a law for the payment of prisoners and appropriated \$15,000 as prisoners' compensation for the biennial period beginning July 1, 1917. Payment in no case is to exceed 25 cents a day for a prisoner, and no prisoner is to be eligible for pay until he has served three months of his sentence.

Supervision of the payment system is under the attorney general, the warden, and the prison inspectors, all of whom constitute a prisoners' compensation board to classify, grade, and fix payments.

Reports at the end of the first year show that the plan is meeting good success and, together with the "honor system," is doing much in forming character among the prisoners, giving them a desire for promotion through hard work and good conduct. The prisoners are cheerfully performing more and better work than formerly, and the improvement in their conduct is marked.

With two exceptions no prisoners have drawn more than half their earnings, and a large number are allowing their earnings to accumulate against the day when liberty is granted them.

## PUBLIC HEALTH.

Although an analysis of the year's mortality and morbidity statistics reveals an increase of 512 in the number of deaths and 178 in the number of cases of contagious diseases over the previous year, the health of the Territory may be considered to have been good and the rates compare favorably with communities of similar size on the mainland.

Nine physicians—six Americans, two Japanese, and one Swiss—successfully passed the examinations of the board of examiners during the year and were recommended for license to practice medicine and surgery in the Territory. A number of the physicians of the Territory have responded to the call of their country and are either members of the Medical Reserve Corps or medical examiners on draft boards.

During the months of May and June the new regulation for the control of venereal diseases was in force.

*Vital statistics.*—In order to figure the mortality and morbidity rates it is necessary to have the population, and as there has been no United States census taken since 1910 the number of people in the Territory has had to be estimated from year to year. From all available data it is estimated that the population of the Territory is ap-

proximately 256,180, divided as to nationality and counties as is shown in the following table:

County.	Population.
Honolulu.....	75,000
Oahu (outside of Honolulu).....	41,600
Hilo.....	10,550
Hawaii (outside of Hilo).....	58,950
Maul.....	38,600
Kauai.....	31,000
Kalawao.....	680
Total.....	256,180

Early in 1918 Mr. R. C. Lappin was sent here by the Census Bureau to make a survey of birth and death records, and the results were such that Hawaii was admitted to the registration area as to deaths but not as to births. Mr. Lappin made a number of valuable suggestions whereby the reporting of births could be made more complete, and they were adopted. It is believed that it will be only a short time before the registration of births will be complete enough and the Territory can be admitted into the registration area.

The total number of deaths in the Territory during the past year was 4,010, an increase of 512 over the previous year. A study of the principal causes of death and an increase in the number of deaths from external causes account for a large proportion of these deaths. The annual death rate per 1,000 of population was 15.65. The number of deaths from external causes was 315 in the Territory, an increase of 51, and if these are excluded we have an annual death rate per 1,000 of population of 14.42 from disease alone. In the city of Honolulu there were 1,395 deaths, an increase of 126 over 1916-17. This gives a death rate of 18.60 per 1,000 of population as compared with 17.64 in the previous year. In the city of Hilo the deaths numbered 263, giving a death rate of 24.93. The increase in the number of deaths in Hilo was 54. In Honolulu the number of nonresidents who died was 182, while in Hilo they numbered 92. Deaths in Honolulu from external causes were 115, an increase of 34 over the previous year. Of the total number of deaths in the Territory, 1,041 occurred in hospitals or other institutions.

*Deaths by counties.*

County.	Total.	Death rate.
Honolulu.....	1,395	18.60
City and county of Honolulu.....	530	12.77
City of Hilo.....	263	24.93
Hawaii (exclusive of Hilo City).....	713	12.09
Kalawao.....	80	117.65
Kauai.....	396	12.77
Maul.....	633	16.44
Total.....	4,010	15.65

*Deaths by nationalities.*

American.....	164	227	7.47
British.....	27		
German.....	27		
Russian.....	9		
Chinese.....		331	14.88
Filipino.....		364	17.84
Hawaiian.....		883	38.64
Japanese.....		1,363	12.76
Korean.....		73	14.60
Asiatic-Hawaiian.....		95	16.84
Caucasian-Hawaiian.....		180	17.21
Portuguese.....		331	13.65
Porto Rican.....		98	17.98
Spanish.....		42	18.50
Others.....		28	42.42
Total.....		4,010	15.65

*Births.*—The total number of births reported at the office of the registrar general during the past year was 9,404, an increase of 697 over those reported the previous period. There were several causes for this increase in birth reports; among those which might be mentioned are the following: Cooperation of the superintendent of public instruction, who requested all school-teachers to report any births which might have occurred in the families of the children they were teaching; the placing of placards in all plantation camps and villages notifying the people of the law requiring the report of births; and also the fact that since the outbreak of the war a large number of young men have had to obtain, in connection with the draft, proof as to exactly when they were born.

The birth rate per 1,000 population was 36.71 for the Territory, as compared with 34.75 for 1916-17.

The following tables give the births and birth rate by counties and nationalities:

*Births by counties.*

County.	Total births.	Birth rate.
Honolulu.....	3,034	40.45
City and county of Honolulu.....	1,441	34.72
Hilo City.....	474	44.08
County of Hawaii.....	2,010	34.10
Kalaheo.....	16	23.53
Kauai.....	1,019	48.52
Maui.....	1,410	36.62
Total.....	9,404	36.71

*Births by nationalities.*

American.....	306	416	12.68
British.....	63		
German.....	37		
Russian.....	20		
Chinese.....		666	29.93
Filipino.....		456	22.35
Hawaiian.....		635	27.79
Japanese.....		4,579	42.57
Korean.....		183	36.60
Asiatic-Hawaiian.....		359	63.45
Caucasian-Hawaiian.....		633	60.52
Portuguese.....		1,043	43.22
Porto Rican.....		237	45.58
Spanish.....		161	70.93
Others.....		31	46.97
Total.....		9,404	36.71

NOTE.—Total Japanese births reported to the Japanese consulate, 5,036. Increase to those reported to board of health, 407.

*Marriages.*—The total marriages reported in the Territory during the past year were 2,572, a decrease of 190; while in Honolulu, instead of being more as it was last year, there were 417 less.

*Principal causes of death.*—The 15 principal causes of death resulted in 2,902 of all the deaths in the territory, or 72.36 per cent. These were as follows:

Cause.	Total deaths.	Rate per 1,000 population.
Diarrhea and enteritis.....	602	2.35
Tuberculosis (all forms).....	466	1.82
Broncho-pneumonia.....	324	1.26
Premature birth, congenital debility, and other causes peculiar to early infancy..	223	.87
Organic diseases of the heart.....	183	.71
Lobar-pneumonia.....	175	.68
Cerebral hemorrhage, apoplexy.....	153	.60
Bronchitis, acute and chronic.....	145	.57
Cancer (all forms).....	140	.55
Bright's disease.....	130	.51
Beri beri.....	89	.35
Syphilis.....	77	.30
Whooping cough.....	77	.30
Leprosy (54 in leper settlement).....	61	.24
Typhoid fever.....	57	.22
Total.....	2,902	72.36

The total number of deaths under 5 years of age were 1,717, which is 42.81 per cent of the entire mortality of the Territory. Of the 1,717 deaths just mentioned, 1,358 occurred under 1 year of age. The increase for the Territory of deaths under 1 year of age was 221, and for Honolulu 81.

Cause.	Total.
Diarrhea and enteritis.....	574
Broncho-pneumonia.....	284
Premature birth, congenital debility and other causes peculiar to early infancy.....	223
Acute bronchitis.....	120
Whooping cough.....	73
Beri beri.....	70
External causes.....	47
Syphilis.....	40
Lobar-pneumonia.....	40
Malformation.....	37
Tuberculosis (all forms).....	27

A campaign for the education of mothers has been carried on here for a number of years, not only by the board of health but by the Palama Settlement and other organizations, but this will have to be prosecuted much more vigorously if the infant mortality is to be reduced.

*Morbidity statistics.*—There were 2,039 cases of contagious and infectious diseases reported during the past year, an increase of 178 cases over the previous year. In cerebrospinal meningitis, enteric fever, leprosy, whooping cough, tuberculosis, and chickenpox an increase is noted, while in the other diseases a decrease is found. The large number of cases of typhoid at Schofield Barracks, due to the water infection and carriers, respectively, and the increased number of cases of tuberculosis reported more than accounts for the increase over the previous year.



The number of cases of contagious and infectious diseases reported by islands is as follows: Oahu, 1,287; Hawaii, 382; Maui, 152; Kauai, 207; Molokai, 11.

All cases of typhoid and paratyphoid were removed to hospitals as soon as discovered, and in addition, at Waipahu, Oahu, a large number of the laborers and their families were immunized against typhoid. This measure had the effect of stopping the spread of the disease in this district.

*Medical inspection of schools.*—The work of this bureau during the past year has been carried on the same as in the previous period with the exception that the work in the outside districts on Oahu was done by the Government physicians.

In Honolulu all the children in 23 public schools were examined. The pupils examined numbered 10,847, which was 199 more than the previous year, and of this number 1,790 were vaccinated. The number of defects found were 8,631, which was 851 less than 1916-17. The greatest number of defects were found in the teeth, and in all cases the children were advised to consult a dentist, but in cases where it was found that the children could not afford to pay a dentist they were sent to the Palama Settlement. The defects were classified as follows: Defective teeth, 5,482; enlarged tonsils, 1,500; adenoids, 357; pediculosis, 532; skin cases, 105; Porto Rican itch, 77; defective eyes, 157; nutrition, 308; tuberculosis suspects, 16; defective heart, 9; ring worms, 2; contagious diseases, 47; defective ears, 16; asthma, 3; adenitis, 14; dislocated hip, 1; fractured arms, 2; nystagmus, 1; abscess of axilla, 1; eczema, 1; total, 8,631.

A survey made of the school children on the island of Hawaii resulted as follows: Defective teeth, 1,421; enlarged tonsils, 876; nutrition, 69; skin diseases, 325; defective eyes, 107; defective ears, 22; adenoids, 50; anemic, 13; adenitis, 11.

The number of defects recorded among the children of Kauai were 3,528, as a result of the survey, segregated as follows: Defective teeth, 1,600; enlarged tonsils, 1,203; adenoids, 143; skin diseases, 99; Porto Rican itch, 16; defective ears, 14; adenitis, 111; pediculosis, 115; nutrition, 142; contagious diseases, 6; defective eyes, 54; conjunctivitis, 25; total, 3,528.

*Pure Food Bureau.*—Conditions arising since the outbreak of the war have increased the importance of this bureau and have also greatly increased the amount of work to be performed. The work covered almost every variety of food and drugs. The milk supply, condition of food in restaurants, the large quantity of questionable salt salmon, the adulteration of bay rum, inspection of canned goods and other foods are among the many activities of the bureau which might be mentioned. Assistance was given the Army, Navy, United States District Attorney, and the United States Food Administrator.

*Insane Asylum.*—At the end of the fiscal year, June 30, 1917, there remained in the institution, paroled or escaped, 257 males and 98 females, a total of 355. During the year 74 males and 18 females were admitted. The total number under care and treatment was 331 males and 116 females, or a total of 447. The maximum number of patients at any one time was 359 while the minimum was 340. The number of deaths during the year were 41 of which 30 were males and 11 females. Four patients escaped but one of them returned after three days. During the year 34 males and 10 females were discharged as

recovered and 16 males and 1 female as improved. On June 30, 1918, there were 251 males and 94 females in the institution or on parole.

Cerebral apoplexy, paresis, chronic nephritis, syphilis, and acute mania were responsible for most of the deaths. One death from pellagra is noted and several other cases are at present in the institution.

During the year the female employees and patients made 404 denim jackets, 241 denim pants, 205 sheets, 226 pillow slips, 114 dresses, 48 chemises, 45 drawers, 4 petticoats, and 2 straight-jackets. An exhibit of articles made by the patients was shown at the fair and caused very favorable comment.

The diet of the patients has been as far as was possible that which was laid down by the Food Administrator. The meatless days have been observed and on these days fish has been substituted. As more than 50 per cent of the patients are "rice eaters" there has been a comparatively low consumption of wheat. Corn meal, corn flour, barley flour, and beans have been used as substitutes for wheat. Of course there have been some cases which required a special diet. About two acres of green vegetables were grown and there was sufficient taro grown for the institution.

The buildings have been kept in repair and some painting has been done. One thousand five hundred feet of water-bound macadam road was built to give access to the sanatorium. The doctor's cottage and treatment building at the sanatorium were completed and this institution was opened for patients on May 1, 1918.

*Antituberculosis bureau.*—The work of the bureau has been carried on along similar lines to that of previous years, but an effort has been made to have better supervision over the cases. During the year there were 937 cases reported as against 900 the previous year. This number added to the 1,991 cases at the beginning of the year makes a total of 2,928 cases handled by the bureau in some manner during the year. There were 466 deaths, while during the year 432 cases were removed from the register because they had either left the Territory, were apparent cures, or could not after a diligent search be located. Of the new cases 714 or 26.2 per cent are under the personal supervision of the nurses or in sanitariums. During the year the nursing staff made over 10,600 visits. There were two nurses on Oahu and one nurse on each of the other islands, with at times an extra nurse on the island of Hawaii. In 370 cases the nurses were able to obtain economic statistics, and this survey showed 34 independent as to means, 122 were wage earners, while the balance, 214, were indigent. In 43 of the cases reported to the bureau it was ascertained that tuberculosis had existed previously in the family. As many cases as the appropriation would allow were maintained in the various hospitals.

Over 52.1 per cent of the new cases came from Honolulu and the island of Oahu. To some extent the medical inspection of recruits under the draft law was responsible for the showing of an increased number of cases.

*Cases by nationality.*—The Hawaiians showed a decrease of 39 cases, or 16 per cent. The number of cases among the Portuguese was 20 more than last year. There were 7 less cases among the Japanese, a decrease of 2.2 per cent. The Chinese, Korean, and Filipinos showed an increase of 34.4 and 51 cases, respectively. Other

nationalities showed a decrease of 20 cases or 54 per cent. Of the new registered cases 309 were born in Hawaii, 503 in Asia, 44 in Europe, 22 in America, and 52 cases the birthplaces are unknown. As to length of residence, 9 were residents less than six months, 10 less than a year, 30 less than two years, 62 less than five years, and the remainder over five years.

*Leprosy.*—On June 30, 1918, the number of lepers living at the settlement was 608, an increase of 21 from the previous year. The following tables give the leper population at Kalaupapa and Kalawao during the year.

	Male.	Female.	Total.
Number of patients living in the settlement June 30, 1917.....	358	229	587
Number of patients transferred from Kalihl Hospital.....	61	26	87
Number of persons examined and declared lepers (exclusive leper settlement).....	1	1	2
Total.....	420	256	676
Number of patients reexamined and released on parole.....	1	.....	1
Number of deaths.....	42	25	67
Total.....	43	25	68
Number of patients remaining in the settlement June 30, 1918.....	377	231	608

*Nationality of patients remaining in the settlement.*

	Male.	Female.	Total.
American.....	2	.....	2
Belgian.....	1	.....	1
Chinese.....	25	.....	25
Filipino.....	12	.....	12
German.....	2	2	4
Hawaiian.....	210	157	367
Japanese.....	12	1	13
Korean.....	12	.....	12
Part-Hawaiian.....	64	57	121
Portuguese.....	33	14	47
Porto Rican.....	2	.....	2
Spanish.....	2	.....	2
Total.....	377	231	608

These people were housed in the different homes and in cottages outside: Baldwin Home, 101; Bishop Home, 54; Bay View Home, 65; McVeigh Home, 12; General Hospital, 21; and outside the homes, 355.

Of nonleprous children the number living at nursery July 1, 1917, was 20; number of births during year, 15; sent to relatives, 2; sent to homes in Honolulu, 16; died during year, 11; remaining in nursery June 30, 1918, 6.

On July 1, 1917, there were 24 male and 15 female kokuas at the settlement, and 1 male and 3 females were admitted during the year, making a total of 43. During the year 1 male and 2 female kokuas were discharged, and one of each sex died, leaving 23 male and 15 female kokuas at the settlement at the end of the period. Other well persons living at the settlement were 31 males and 19 females, a total of 50. This makes the total population of the settlement 702.

The census of live stock owned by the board shows 19 horses, 671 head of cattle (65 oxen included), 30 donkeys, and 136 hogs.

*Kalihi hospital.*—There were 56 males and 24 females examined during the year and declared lepers; 1 male and 2 females released on parole were reexamined and declared lepers; while 1 patient was readmitted for breaking parole. The nationality of those declared lepers was as follows: Chinese, 6; Filipino, 6; German, 1; Hawaiian, 39; Japanese, 5; Korean, 3; Norwegian, 1; Part-Hawaiian, 16; Portuguese, 5; Porto Rican, 1; total, 83. Locality was as follows: Honolulu, 30; Oahu (exclusive of Honolulu), 6; Hawaii, 37; Kauai, 5; Maui, 5; total, 83.

*Kalihi Boys' Home.*—On July 1, 1917, there were 37 boys living at the home and 9 were admitted during the year, while 6 were discharged, leaving at the end of the present year 40 boys remaining in the home.

*Kapiolani Girls' Home.*—Sixty girls were living in the home on July 1, 1917, and 7 were admitted. During the year 5 were discharged and 2 died, leaving at the end of the year the same number as at the beginning.

*Resident Physician-Leper Settlement.*—Dr. W. J. Goodhue, who as resident physician for the past 16 years has faithfully performed his duties and cared for the patients at the settlement, gives a very full report of his work and the results which have been accomplished. The use of chaulmoogra oil combined with tonics has been the main treatment. He also performed a number of major and minor operations.

*United States Leprosy Investigation Station.*—The work of this station has been carried on at Kalihi under its director, A. A. Surgeon H. T. Hollmann, and has consisted mainly of laboratory investigations and animal experiments. A number of papers have been written and submitted to the bureau, but as yet have not been published. Through the assistance of President Dean, of the College of Hawaii, the station has been enabled to administer chaulmoogra oil in a new form and with very gratifying results.

*United States Public Health Service.*—Surgeon F. E. Trotter, chief quarantine officer, has as always given the board assistance whenever called upon. The use of the quarantine station and crematory has been of great help to the department. In Washington Surg. Gen. Rupert Blue, Asst. Surg. Gens. McLaughlin, Perry, Creel, Warren, and Schereschewsky, also Surg. George W. McCoy were of great assistance in many ways.

The following letters cover some of the work in leprosy investigation by the United States Public Health Service during the year: .

HONOLULU, HAWAII, June 30, 1918.

DR. J. S. B. PRATT,

*President Territorial Board of Health, Honolulu, Hawaii.*

SIR: I have the honor to submit a brief report of some the work of this station which has been carried on at the laboratory in Kalihi, Honolulu.

Surg. Donald H. Currie served as director until July 28, 1917, on which date he was transferred to Boston, and I assumed charge.

During the year in addition to the treatment of your patients at Kalihi Hospital I have made the following:

*Cultural studies.*—The bacillus of leprosy was cultivated from the leprous tissues of a number of patients under treatment.

Numerous attempts at the cultivation of the rat leprosy bacillus were also made.

**Animal inoculations.**—During the year it was found that the leprous tissue inoculated into guinea pigs sooner or later was entirely absorbed without involvement of any of the internal organs.

Two calves were inoculated with leprous tissue, and at this time, six months after the operation, there are distinct nodules at the site of inoculation. This is the first time, so far as I can learn, that an attempt to inoculate calves has been made.

**Immunity studies.**—The blood of nearly all the patients has been examined from time to time for the presence of leper bacilli.

Wassermann and other complement deflection tests have been made on the blood of the patients.

Since June 1, 1918, on which date your bacteriologist was mobilized with the National Guard, I have endeavored to place all the facilities of this laboratory at your disposal in caring for your public health laboratory work.

Respectfully,

HARRY T. HOLLMANN,  
Director.

HONOLULU, HAWAII, June 29, 1918.

Dr. J. S. B. PRATT,

President, Territorial Board of Health, Honolulu, Hawaii.

SIR: I have the honor to render a report of the Kalihi Hospital medical department for the fiscal year ended June 30, 1918.

	Male	Female.	Total
Patients under treatment during the year	92	47	139
Patients under treatment July 1, 1917	34	21	55
Patients admitted during the year	58	28	84
Patients paroled	7	2	9
Deaths during the year	4	2	6
Transferred to Molokai	61	26	87
Transferred to Japan	1	1	2
Patients under treatment June 30, 1918	19	16	35
Examination board (official) during the year	61	27	88
Declared lepers	58	26	84
Declared nonlepers	3	1	4
Reexamination board for parole	11	5	16
Release on parole	7	2	9
Not warrant to parole	4	3	7
Cases paroled from Molokai (reexamined) declared lepers	1	2	3
Cases paroled from Kalihi Hospital (reexamined) declared not a leper	1	.....	1

I examined 167 persons unofficially for leprosy and also 1 for parolement at Kalaupapa, Molokai, during the year.

One patient paroled from Kalihi Hospital last year was recommitted to the hospital.

**Medical treatment.**—The majority of the patients received chaulmoogra oil and Lugol's iodine solution internally—20 cubic centimeters of the oil and 8 cubic centimeters of the iodine solution daily.

**Intramuscularly.**—With the assistance of Dr. Dean, professor of chemistry at the College of Hawaii, we have isolated four different fatty acid fractions from chaulmoogra oil and, in the form of ethyl esters, have administered them intramuscularly with the most encouraging results, as will be seen from the following table:

Case.	Age.	Type.	Acid used.	Treated.	Result.
1	20	Nod.	A.	6 weeks	No improvement.
2	31	Nod.	A.	6 months	Slight improvement.
3	25	Nod.	A.	do	Marked improvement.
4	55	Nod.	A.	do	Improvement.
5	10	Nod.	A.	do	Marked improvement.
6	9	Nod.	A.	do	Improvement.
7	12	Nod.	B.	6 weeks	No improvement.
8	9	Nod.	B.	12 months	Improvement.
9	11	Aresth.	B.	do	No improvement.
10	40	Nod.	B.	6 months	Slight improvement.
11	25	Nod.	B.	do	Improvement.
12	45	Nod.	B.	do	Marked improvement.
13	36	Nod.	C.	do	Do.
14	19	Nod.	C.	do	Do.
15	42	Nod.	C.	do	Slight improvement.
16	60	Nod.	C.	do	Marked improvement.
17	33	Nod.	D.	12 months	Do.
18	46	Nod.	D.	6 months	Marked improvement. Bacilli disappeared from nearly all lesions.
19	19	Nod.	D.	do	Do.
20	36	Nod.	D.	do	Do.
21	14	Nod.	A, B, C, D.	3 months	Marked improvement. No bacilli can be found in the site of the old lesions.
22	21	Nod.	A, B, C, D.	do	Improvement
23	17	Nod.	A, B, C, D.	do	Improvement in nodular lesions symptoms caused by nerve involvement not improved.

Unfortunately I am unable to obtain a sufficient supply of these acids to place more than 20 patients on them. My supply of the acids depends on the gratuitous time Dr. Dean is able to give to the chemical isolation of these acids. I would recommend to you, Mr. President, that if possible a chemical assistant be placed on medical pay roll to work under Dr. Dean and my direction in the isolating of these in sufficient quantities to place all the cases at Kalihi Hospital on them.

*Locally.*—Trichloracetic acid applied locally to the leprosy lesions has been found to be superior to the carbon dioxide snow. Its application is not nearly so painful, the subsequent inflammatory reaction is more marked.

*Sunlight treatment of leprosy ulcerations.*—During the past year heliotherapy has been practiced in those intractable ulcerations of the skin that so frequently occur in those cases of leprosy in which the nerve involvement is marked.

*Surgical treatment.*—During the year 14 surgical operations were performed under general anesthesia; 2,030 surgical dressings were applied under the supervision of the trained nurse, Mrs. Kay, R. N.

In conclusion, I would call your attention to the need of a medicated bathhouse at Kalihi Hospital in order that the patients can have the benefit of the various hot medicated baths.

Respectfully,

HARRY T. HOLLMANN.

The following letter covers the medical and surgical work at the leper settlement for the period:

TO THE PRESIDENT AND MEMBERS OF THE  
TERRITORIAL BOARD OF HEALTH,  
Honolulu, Hawaii.

DEAR SIR AND GENTLEMEN: Herewith I respectfully submit for your consideration a report of the medical and surgical department of the leper settlement for the period ended June 30, 1918.

Regular patients on chaulmoogra oil and gualacol comp. show an increase over the period of the last report and tabulated monthly as follows:

	Male.	Female.	Total.
1917, July.....	22	19	41
August.....	22	19	41
September.....	19	15	34
October.....	34	19	53
November.....	34	19	53
December.....	34	19	53
1918, January.....	32	18	50
February.....	32	18	50
March.....	32	18	50
April.....	32	18	50
May.....	33	19	52
June.....	35	19	54

The average of above hypodermic treatments given for the period of this report are 4,856.

Of these patients 36 are also taking chaulmoogra and gualacol comp. per orem.

Other cases on the chaulmoogra oil and gualacol comp. per orem in the various homes, hospital, and general settlement number 40.

Cases on chaulmoogra oil plain, which can not well be administered other than by mouth, number 14.

Total number of patients on chaulmoogra oil in some form including hypodermic medication number 275.

I have to note one case on the Varham preparation of chaulmoogra oil hypodermically. There is unquestionably some improvement in this case but not any greater, nor perhaps as marked, as the improvement noted in respect to the other cases on the regular chaulmoogra oil and gualacol comp. injected and per orem.

Other special treatments, together with those noted above, tabulate as follows:

	Male.	Female.	Total.
Chaulmoogra oil per orem.....	97	47	144
Chaulmoogra oil and gualacol comp. per orem.....	51	25	76
Chaulmoogra oil and gualacol comp. hypodermically.....	36	19	55
Trichloroacetic, locally.....	18	14	32
Semerak paste and ointment, locally.....	5	2	7
CO <sub>2</sub> .....	17	16	33
Scott's emulsion C. L. oil.....	19	14	33
Waterbury's C. L. oil w/I. Q. S.....	14	11	25
I. Q. S. phosphates.....	9	6	15
Strychnine sulphate.....	10	6	16
Lugol's solution.....	2	15	17
K. I.....	10	5	15
Sajodin.....	1	1	2
Fowler's solution.....	12	10	22

It may be noted under the treatment with Fowler's solution that this is given as a regular treatment for certain phases of the disease, where it seems to be indicated, and as a special treatment in cases of lepromatitis (leprous bacilleemia) in which ailment it seems to be especially efficacious in conjunction, of course, with local remedial measures, such as cooling lotions and baths.

Cases on tonsillar cauterization and other treatments for tonsillar affections number 53.

Those include phenol, C. P. neutralized with alcohol, copper sulphate applied with pencil, and other astringent and antiseptic applications.

Cases of leprous rhinitis treated with various suitable applications principally through atomization number 96.

Personal calls made by the physician under respective headings below number as follows:

Baldwin home.....	144
Bishop home.....	240
Hospital.....	405

Bay View home.....	630
General settlement.....	2,190
Prescriptions filled at Kalaupapa dispensary.....	10,875
Prescriptions filled at hospital.....	1,001
Prescriptions filled at Bishop home.....	630
Prescriptions filled at Baldwin home.....	1,344
Aseptic surgical dressings at dispensary.....	2,924
Aseptic surgical dressings at hospital.....	5,676
Aseptic surgical dressings at Baldwin home.....	8,002
Aseptic surgical dressings at Bishop home.....	7,248

Under surgical procedures may be noted the following:

Major operations.....	85
Minor operations.....	226

Regular bacteriological examinations of patients under treatment to determine progress made has been a regular procedure, and in pursuance with this custom I note 48 patients so examined during the period. Each of above patients has been snipped regularly on an average of every six weeks.

Other bacteriological examinations to determine or otherwise the presence of tuberculosis number 7. The patients so examined number 3. Other bacteriological examinations for various intercurrent infections number 18.

Milk has been supplied regularly by the milk man and carrier to the Bishop and Bay View homes. In addition to this milk permits have been issued to patients outside of the homes numbering 104.

#### RECAPITULATION.

Total number of patients on chaulmoogra oil in some form, including hypodermic medication.....	275
Total number of patients on special treatments.....	365
Total number of major operations.....	85
Total number of minor operations.....	226

Grand total of cases treated medicinally and surgically for the diseases in the period of this report.....	901
Total number of gallons of milk supplied to the two above-mentioned homes and general settlement during the period.....	2,737

**Balneotherapy.**—Bathing facilities are supplied in each of the various homes as well as for the general settlement, for which purpose plain hot water and medicated baths are constantly available and much appreciated by the general run of patients here.

Medicated baths consist principally of eucalyptus decoction and some one of the various sulphur compounds, the latter principally for scabies infection.

In connection with the above it may be noted that tar and other medicated soaps are dispensed regularly for those availing themselves of the bathhouse facilities, and also to private homes where many have their own private bath-houses.

#### GENERAL HOSPITAL.

Number of inmates June 30, 1917.....	51
Cases admitted during the period:	
Medical.....	32
Surgical.....	28
	60
	111
Number of deaths.....	14
Number of discharged.....	77
	91
Number of inmates June 30, 1918.....	20
Number of prescriptions filled.....	1,001
Number of postoperative and other surgical dressings.....	5,676



## Number of operations performed:

Major.....	28	
Minor.....	103	
		131
Greatest number of inmates any one time during the period.....		51
Number of patients treated medicinally for the disease.....		26
Number of patients treated surgically for the disease.....		131

In connection with the above hospital report it should be noted that while the greatest number of inmates at any one time in the hospital for the period of this report numbered 51, 23 of these were removed to the Bay View home when this new home was opened on July 6, 1915, or five days after the beginning of the period of this report, leaving 28 inmates of the hospital after the 6th of July, 1917.

A number of minor surgical operations are performed in the hospital, whom it is not required to admit there for residence temporarily, while an almost equal number of minor surgical cases are operated upon at the Kaluapapa dispensary operating room, and a few major surgical operations are performed in private dwellings.

## NURSING HOSPITAL.

The following data with reference to the Nursing Hospital may be noted:

	Male.	Female.	Total
Number of babies June 30, 1917.....	11	9	20
Born during the period.....	8	7	15
			35
Deaths during the period.....	5	5	11
Stillborn.....	1		
Number of babies discharged during the period:			
To Boys' Home, Kalihi.....	9		
To Kapiolani Girls' Home.....		7	
Relative outside.....	2		18
Number of babies June 30, 1918.....	2	4	6
			35

The matron and nurses at the Nursing Hospital have been untiring in their efforts to give the best care possible to the inmates of this institution. Six of the total deaths during the period were due to enteric infections, which, it is well known, are especially severe when attacking infants on artificial diet, when the same have been from birth removed from mother or wet nurse.

Three cases of acute infantile marasmus are noted among the causes of death in the above total, which condition is frequently met with, as also noted in previous reports, among children born here. I am glad to state that among those above noted as discharged, and also those remaining in the nursery at the date of this report, all appear to be healthy and robust youngsters.

The Nursing Hospital was constructed and first occupied September 17, 1908, and since that date all infants born have been segregated immediately upon birth and taken care of in this institution until sufficiently old to be removed to one of the various homes in Honolulu.

The following data will illustrate at a glance the value of this institution, showing the great difference between the number of children infected with the disease since this system of segregation was instituted, as against the number infected previous to that time under the old system:

	Percent- age.	Male.	Female.	Total.
Number of children admitted in the Nursing Hospital from its opening September 17, 1908, to the present time.....		92	75	167
Number of above infected with the disease.....			1	1
Percentage infected of those segregated from birth in the Nursing Hospital.....	0.0064			
Number of children born in the settlement previous to institution of above segregation.....		114	104	218
Number of above infected with the disease.....		15	10	25
Percentage infected of those born in the settlement previous to institution of above segregation.....	.1146			
Grand total number of children born in the settlement from inception of any record.....		198	176	374
Grand total number of children infected.....		15	11	26
Grand total percentage infected.....	.0695			
Average of births in the settlement for the last 10 years, or since opening of nursery.....	154			

<sup>1</sup> Of the total above noted of 167 admittances, 8 males, 3 females, a total of 11 were born previous to the opening of the nursery, and are therefore not figured in percentage of those infected since inception of nursery.

*New Bay View Home.*—These buildings are a credit to any institution, and when all of the various buildings constituting this home are completed there will be accommodation for 96 without overcrowding in the least.

There are at present—July 1, 1918—66 inmates, 41 males and 25 females, and the institutions is under the immediate and efficient management of Mr. and Mrs. Hart.

*Epidemics.*—Happily, no epidemics have to be recorded for the period of this report, although it will probably be impossible to prevent the infection of influenza, which is now raging on some of the other islands, from making its appearance here in the near future.

*New inmates.*—Under the above heading I have the following to record:

Eighty-nine inmates entered the settlement during the period covered by this report.

	Male.	Female.	Total.
From Kalihl Hospital, Oct. 6, 1917.....	18	32	50
From Kalihl Hospital, June 23, 1918.....	29	8	37
From Leeward Molokai, May 2, 1918.....	1		1
From Leeward Molokai, May 22, 1918.....		1	1
			89

From Leeward Molokai two suspects—one male, one female—voluntarily waived examination at Kalihl and entered settlement May 2 and May 23, 1918. They were not either of them advanced cases, but still showed unmistakable signs of the disease, and bacteriological examinations of the same proved positive.

One of the new inmates who entered the settlement October 6, 1917, male, and who was about to have been paroled while in Kalihl, was on November 15, 1917, examined by Drs. Hollmann and myself, and paroled on December 6, 1917.

*Sanitation and hygiene.*—A great amount of necessary work has been carried on in this department, details of which may be seen in the table below.

*Reexamination.*—It may be of interest as well as of considerable referential and statistical value to here review the total number of reexaminations of lepers of the Molokai Leper Settlement made since my incumbency here in 1902, both of those segregated and sent to Kalihl receiving station for re-examination, and also of those examined here at the Molokai institution, together with results and data relating to the same:

#### FIRST.

Date: 1903.

Residence: Leper Settlement, Molokai.

Place of reexamination: Leper Settlement, Molokai.

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Board of examining physicians: Drs. McDonald and Goodhue.  
Number reexamined, 54.

Results:

Nonleprous, male, 0; female, 1; paroled, male, 8; female, 3; total, 12.  
Leprous, 42.

SECOND.

Date: 1906.<sup>1</sup>

Residence: Leper Settlement, Molokai.

Place of reexamination: Kalihi receiving station.

Board of examining physicians: Kalihi.

Number reexamined: 12.

Results: All declared leprous.

THIRD.

Date: 1908.

Residence: Leper Settlement, Molokai.

Place of reexamination: Kalihi receiving station.

Board of examining physicians: Same as above noted for 1906.

Number reexamined: 16.

Results: Paroled, male, 10; female, 6; total, 16.

FOURTH.

Date: 1909.

Residence: Leper Settlement, Molokai.

Place of reexamination: Leper Settlement, Molokai.

Board of examining physicians: Drs. Wayson, Hayes, and Goodhue.

Number reexamined: 140.

Results:

Declared nonleprous, male, 1; female, 1.

Paroled, male, 39; female, 16; total, 55.

Leprous, 84.

FIFTH.

Date: 1913.

Residence, Leper Settlement, Molokai.

Place of reexamination: Leper Settlement, Molokai.

Board of examining physicians: Drs. McCoy, Barnes, and Jackson.

Number reexamined: 22.

Results:

Declared nonleprous, male, 1; female, 2; total, 3.

Paroled, male, 4; female, 2; total 6.

Leprous, 13.

SIXTH.

Date: 1915.

Residence: Leper Settlement, Molokai.

Place of reexamination: Leper Settlement, Molokai.

Board of examining physicians: Drs. McCoy, Hollmann, and Goodhue.

Number reexamined: 33.

Results:

Declared nonleprous, male 1; female, 1.

Paroled, male, 10; female, 5; total, 15.

Leprous, 17.

SEVENTH.

Date: 1917.

Residence: Leper Settlement, Molokai.

Place of reexamination: Leper Settlement, Molokai.

Board of examining physicians: Drs. Sanborn, E. S. Goodhue, and W. J. Goodhue.

Number reexamined: 80.

Declared nonleprous, male, 0; female, 1; total 1.

Paroled, male, 5; female 7; total 12.

Leprous, 17.

<sup>1</sup> It may be pertinent here to note that out of the 12 patients of the Leper Settlement, Molokai, sent to Kalihi receiving station for reexamination in 1906, selected by myself as probably nonleprous, and there declared leprous and returned to the Leper Settlement as leprous, 11 of this lot were again sent to Kalihi receiving station in 1908, together with 5 other residents of the Leper Settlement, Molokai, and were there by the board of examining physicians declared nonleprous.

**Results:**

The following data with reference to reexaminations both at Kalihi Receiving Station and at Molokai Leper Settlement may here be noted:

- (1) A. G. (F) Declared leprous at Kalihi Receiving Station, date unknown, but previous to or about 1897 was sent to leper settlement, Molokai. Declared nonleprous in 1908 at Molokai.
- (2) J. N. (M) First declared leprous at Kalihi Receiving Station in 1900. Sent to Kalihi Receiving Station from Molokai Leper Settlement in 1903 and was released, and later returned to Molokai Leper Settlement in 1909 as leprous.
- (3) J. K. (M) Declared leprous at Kalihi Receiving Station in 1896 and sent to Molokai Leper Settlement. Returned to Kalihi Receiving Station for reexamination in 1904 and declared nonleprous.
- (4) S. M. (M) Declared leprous at Kalihi Receiving Station (date uncertain), but about 1904 returned to Kalihi Receiving Station for reexamination from Molokai Leper Settlement and declared nonleprous in 1907.
- (5) C. A. (F) Declared leprous in 1900 at Kalihi Receiving Station. Returned to Kalihi Receiving Station in 1903 from Molokai Settlement for reexamination and again declared leprous there. In 1908 again sent to Kalihi Receiving Station for reexamination and declared nonleprous.
- (6) J. K. W. (M) Declared leprous at Kalihi Receiving Station between 1894 and 1895 and sent to Molokai Leper Settlement. Returned to Kalihi Receiving Station for reexamination and declared nonleprous in 1908.
- (7) P. A. (M) Declared leprous in 1900 at Kalihi Receiving Station. Returned to Kalihi Receiving Station in 1903 for reexamination and again declared leprous. After six years' residence at Molokai Leper Settlement was declared nonleprous in reexamination of 1909 at Molokai Leper Settlement.
- (8) P. (M) Declared leprous in 1906 at Kalihi Receiving Station and sent to Molokai Leper Settlement. Declared nonleprous in 1909 at Molokai Leper Settlement.
- (9) M. M. (M) Declared leprous in 1902 at Kalihi Receiving Station and sent to Molokai Settlement. Declared nonleprous in 1913 at Molokai Leper Settlement.
- (10) K. L. (F) Born in leper settlement, Molokai. Declared leprous, date uncertain. Declared nonleprous in 1913 at leper settlement, Molokai.
- (11) O. M. (F) Born in leper settlement, Molokai. Sent to Kalihi Girls' Home and later declared leprous at Kalihi Receiving Station in 1909 and sent to Molokai Leper Settlement.
- (12) L. (M) Declared leprous in 1904 at Kalihi Receiving Station and sent to Molokai Leper Settlement. Declared nonleprous in 1909 at Molokai Leper Settlement.
- (13) K. (F) Declared leprous in 1905 at Kalihi Receiving Station and sent to Molokai Leper Settlement. Declared nonleprous in 1917 at Molokai Leper Settlement.

The remaining patient of the original 12 being unwilling to make the trip to Kalihi in 1908 was reexamined at leper settlement, Molokai, in 1909 and also declared nonleprous.

**To recapitulate:**

Total number reexamined from 1903 to 1918.....	313
Total number declared leprous.....	185
Total number declared nonleprous.....	13
Total number declared nonleprous (paroled).....	115
Grand total discharged.....	128
Total number declared nonleprous returned as leprous....	0
Total number declared nonleprous (paroled) returned as leprous.....	5
Grand total returned as leprous.....	5
Percentage of those paroled returned as leprous.....	0.0434+
Grand total percentage of those returned as leprous.....	0.0390+

Let it be noted of the total of 313 cases reexamined, 6 patients are to be added to make the above total, who were sent to Kalihi individually at different times during the period.

In conclusion I wish to express deep appreciation to the president and members of the board of health for uniform support and courtesy; also to the superintendent of the leper settlement for his cheerful and uniform cooperation.

Respectfully,

W. J. GOODHUE, M. D.

## UNITED STATES PUBLIC HEALTH SERVICE.

The activities of the United States Public Health Service in the Hawaiian Islands for the fiscal year ended June 30, 1918, were as follows: (1) National quarantine; (2) marine hospital relief; (3) medical examination of immigrants; (4) plague laboratory; (5) physical examination of applicants for marine licenses and other Government positions.

*General.*—During the year 7 vessels arrived with histories of having had smallpox on board during the voyage, while 3 vessels arrived with leprosy.

A total of 609 vessels were boarded and inspected upon arrival at ports of entry as follows: Honolulu, 527; Hilo, 34; Kahului, 25; Mahukona, 3; Lahaina, 1; and Koloa, 12, while 7 vessels were spoken and passed at Honolulu and 43 were boarded and passed on medical officer's certificates.

Port sanitary statements to the number of 688 were issued to departing vessels at Honolulu, 70 at Hilo, 40 at Kahului, 6 at Mahukona, 3 at Lahaina, and 15 at Koloa.

Eight Panama Canal Zone bills of health were issued at the several ports during the year.

A few statistics in this connection are shown in the following:

Port sanitary statements issued.....	688
Crew inspected.....	64,546
Passengers inspected.....	80,930
Vessels inspected.....	609
Vessels disinfected and fumigated.....	180

*Contagious diseases.*—Of vessels which arrived during the year, 127 had contagious and infectious diseases on board, there being 60 cases of measles, 39 of mumps, 1 of diphtheria, 2 of scarlet fever, 3 of epidemic cerebrospinal meningitis, 2 of pertussis, 19 of varicella, 109 of tuberculosis, 14 of typhoid fever, and 3 of erysipelas.

Of this number there occurred amongst the personnel of transports 55 cases of tuberculosis, 29 of mumps, 29 of measles, 2 of varicella, and 9 of dysentery.

These cases were mostly removed at this port and taken to the department hospital, while those occurring on other vessels were reported to the board of health and passengers detained on board until the cases had been acted upon by a representative from that service.

*Deaths on arriving vessels.*—A total of 57 deaths occurred on vessels at this port during the year, of which 7 were from tuberculosis, 2 apoplexy, 1 syphilis, 3 cancer, 4 beriberi, 14 pneumonia, 1 fracture, 6 bronchitis, 3 rheumatism, 1 malnutrition, 5 heart disease, 1 stillborn, 1 asthenia, 1 smallpox, 1 intestinal obstruction, 2 ulcer of stomach, 1 cerebrospinal meningitis, 1 septicæmia, 1 suffocation, and 1 from gastritis.

During the year 12 vessels arrived from Atlantic ports by way of the canal, while 7 departed from the islands for ports on the east coast of the United States. This is a reduction of 57 vessels as compared with the record of the preceding year.

*Fumigation for mosquitoes.*—Fumigation for the destruction of mosquitoes of vessels from ports on the west coast of Mexico, Central and South America, (was continued during the year, a total of 14 vessels being thus treated.

*Cremation.*—The remains of 12 persons were cremated at the quarantine station during the year, the following being the causes of death, namely: Leprosy, 5; ptomaine poisoning, 1; typhoid fever, 1; pulmonary tuberculosis, 2; pneumonia, 2; septicæmia, 1.

*Plague on the island of Hawaii.*—Plague was again reported only from the island of Hawaii. Here it has been present for the past 18 years, and, as in the past, it continued to remain localized to the Hamakua district.

There were 4 cases of human plague reported during the year, with a fatal termination in each case.

The Territorial board of health instituted the most energetic measures in all cases, additional rat trappers being employed, and a very extensive poisoning campaign was carried out.

There were 24 plague-infected rodents obtained during the year from the Hamakua district, of which 2 were found in July, 1 in August, 14 in September, 4 in October, 2 in March, and 1 in May.

*Rat campaign.*—A total of 16,275 rats and mongoose were destroyed in the district of Honolulu during the year, of which 16,006 were trapped, 104 were killed in the fumigation of vessels, 3 were found dead and brought in by outsiders, 27 were shot from trees, while 136 mongoose were taken.

This was a decrease of 1,255 rodents from the number obtained the previous year.

*Immigration.*—A total of 4,185 immigrants were inspected at this port and 257 were certified for diseases or disabilities in accordance with the immigration law.

## NATIONAL GUARD OF HAWAII.

The fiscal period ending June 30, 1918, was undoubtedly the most momentous in the entire history of the National Guard of Hawaii. The outstanding feature of the year was the drafting into Federal service on June 1, 1918, of the First and Second Regiments, Hawaiian Infantry, National Guard, with attached medical detachments.

Another prominent feature, although greatly overshadowed by the federalization of the guard, was the encampment of the First Hawaiian Brigade at Kawailoa, Oahu, during November, 1917, this being the first time in the history of the Territory when such a large body of civilian soldiers had been congregated in one camp.

Probably the most important feature during the year, as affects the guard in the future, has been initial steps in the organization of a new guard regiment and a company of Coast Artillery. Plans were set in motion for this new organization almost before the First Regiment had moved out of the armory, and there is every indication that the new regiment will be a reality in the not distant future.

**FEDERALIZATION OF GUARD.**

During the year considerable conflicting information was received in the office of the adjutant general relative to the federalization of the National Guard of Hawaii. A majority of this information pointed to the nonfederalization of the local guard organization, and every effort was made by all loyal Americans in the Territory to bring about the event of June 1, 1918. Information was received in the office of the adjutant general to the effect that the First and Second Regiments were to be federalized June 1, on the evening of May 31, at about 8 o'clock.

A meeting was called to which was invited field and staff officers of the First Regiment, and the matter of mobilization discussed for several hours. During this discussion, it developed that there were a number of officers in the First Regiment whom it was not deemed expedient to take into Federal service with the organization. These officers were discussed at considerable length and the meeting resolved itself into a committee to act, and the field and staff officers of this regiment decided on their own regimental organization.

The commanding officer of the Second Regiment and the majors commanding the battalions on Maui and Kauai met in the office of the adjutant general the morning of June 1, and took similar action on the Second Regiment, a few changes being made in this organization.

It is believed that the action referred to in the two preceding paragraphs was the only logical action and gave to the organizations drafted into Federal service the best available roster of officers.

The following figures show the strength of the two regiments as drafted into Federal service, including medical personnel:

	Officers.			Enlisted men.		
	Reported.	Rejected.	Accepted.	Reported.	Rejected.	Accepted.
First Infantry.....	52	0	52	1,394	377	1,017
Second Infantry.....	53	4	49	1,741	298	1,443

These figures show that exactly 20 per cent of the enlisted men were rejected, but this does not necessarily mean that this percentage was physically unfit, as a number of the rejections were made due to the fact that the men had served a prison sentence. A number of these same men who were rejected in the guard organization have since been drafted into Federal service through the selective-draft operation, it being apparent that the regulations are less stringent than those governing the federalization of National Guard organizations.

The organizations not called into Federal service are the engineer company, the signal corps company, the cavalry troop, brigade headquarters, dental corps, and staff corps and departments.

It has been recommended by this office that the cavalry troop, which is located on the Parker Ranch at Kamuela, Hawaii, be disbanded, and it is probable that such action will be approved by the War Department. The reason for this recommendation is the fact that the troop of cavalry has long since ceased to take any interest

in military work, largely a result of the management of the ranch having undertaken extensive agricultural operations in connection with the war.

The work of mobilization of the First Infantry was quickly accomplished, the organization going into company rendezvous at the armory the morning of June 1 and moving into Camp Armstrong the morning of June 5. This latter movement could easily have been consummated on the 2d or 3d of June had same been desired by the Army authorities.

The task of bringing the Second Infantry into Honolulu for mobilization reflects great credit upon the Territorial quartermaster and his corps. A schedule was quickly arranged and carried out as arranged. The troops commenced arriving in Honolulu on June 8, and continued to arrive by each succeeding interisland steamer until June 18.

#### ANNUAL ENCAMPMENT.

The annual encampment for 1917 was held at Kawailoa, Oahu, from November 9 to 30, inclusive, each organization in the entire brigade being in camp for a period of not less than 15 days. A large corps of officers and noncommissioned officers was detailed to the work of instructing the two Infantry regiments and troop of Cavalry, and a great deal of benefit resulted from this encampment. Many errors occurred which were corrected as rapidly as possible, and following the encampment, an officers' school was instituted two nights each week, and continued until federalization became an assured fact. These schools, conducted by Maj. E. F. Witsell, United States Army, senior inspector-instructor, covered a wide range of subjects and resulted in the National Guard being called into Federal service in a much more efficient condition than would have been possible at an earlier date.

#### NEW GUARD ORGANIZATION.

The contemplated organization of the Fifth Infantry, which incidentally is numbered the Fifth on account of the Hawaiian National Guard having previously boasted a First, Second, Third, and Fourth Regiment, will be distributed throughout the entire Territory.

It is proposed at the present time to place one battalion on the island of Hawaii in the vicinity of Hilo, with the balance of the regiment in Honolulu, excepting two companies, one on Maui and one on Kauai.

Under the regulations laid down in circulars No. 3 and No. 8 of the militia bureau, 1918 series, the new regiment will not be called upon for over-seas service, but will be held for home defense only. This fact should prove a big factor in recruiting the organization up to the desired strength.

#### UNITS NOT FEDERALIZED.

The organizations remaining with the Territory after mobilization of the first and second regiments are the brigade headquarters, staff corps and departments, signal corps company, corps of engineers, and



troop of cavalry. It is probable that a recommendation for the disbandment of the engineer corps will be made later, as this organization has never been efficient. By the disbanding of the engineers and cavalry it would be possible for the Federal Government to take over a large amount of equipment that could probably be used to good advantage elsewhere. Brigade headquarters should now be disbanded for the reason that the brigade organization is gone. Staff corps and departments will continue to function with the organization of the new regiment and coast artillery.

### PRESENT STRENGTH.

The strength of the National Guard of Hawaii June 30, 1918, is: Officers, 26; enlisted men, 329.

### UNITED STATES INTERNAL-REVENUE SERVICE.

During the half month between the organization of Territorial government and the beginning of the first complete fiscal year the collections amounted to \$7,454.30.

The following tables show the statistics in regard to this service:

#### *Special tax stamps and certificates of registry issued.*

Rectifiers of less than 500 barrels per annum	5
Wholesale liquor dealers	65
Retail liquor dealers	201
Wholesale dealers in malt liquors	2
Retail dealers in malt liquors	3
Brewers of 500 barrels or more per annum	1
Brewers of less than 500 barrels per annum	1
Wholesale dealers in uncolored oleomargarine	1
Manufacturers of playing cards	3
Wholesale dealers in denatured alcohol	2
Manufacturers of cigars	1
Licensed organizations to collect foreign income	16
Brokers	39
Customhouse brokers	10
Pawnbrokers	3
Shipbrokers	7
Proprietor of theaters, at \$12.50	21
Proprietor of theaters, at \$25.00	9
Proprietor of theaters, at \$37.50	5
Proprietor of theaters, at \$50.00	13
Proprietor of theaters, at \$75.00	10
Proprietor of theaters, at \$100	5
Proprietor of public exhibitions	39
Proprietor of billiard and pool rooms	180
Manufacturers of cigars, at \$2.00	1
Importers and manufacturers of narcotics	1
Druggists and dispensaries	63
Physicians, dentists, and veterinarians	179
Total	888

	1917	1918	Total, 1901-1918.
Collections on lists.....	\$18,964.00	\$1,464.22	\$101,583.55
Fermented liquors.....	66,056.75	55,548.04	452,643.43
Distilled spirits.....	49,846.06	192,547.75	621,700.42
Cigars and cigarettes.....	94.58	3,511.80	15,572.58
Tobacco and snuff.....	2,366.00	19,287.50	64,683.63
Special taxes, regular.....	13,184.24	3,397.67	293,535.09
Special tax Oct. 22, 1914.....	8,372.41		35,285.98
Special taxes on narcotics.....	246.01		717.70
Playing cards.....	754.02	1,647.75	18,335.77
Documentary stamps (June 13, 1908).....			68,042.60
Documentary stamps (Oct. 22, 1914).....	15,613.58		92,894.86
Proprietary stamps (Oct. 22, 1914).....	128.75		4,938.80
Proprietary stamps.....			11,267.34
Corporation income tax.....	909,818.58	7,146,693.82	9,287,671.30
Individual income tax.....	383,890.70	1,484,700.18	2,040,759.49
Wine stamps (Oct. 22, 1914).....	31,281.84		114,485.08
Opium order forms.....	20.30	15.00	124.80
Bankers' special taxes.....	3,326.24		9,772.61
Capital stock tax.....	50,721.13	130,856.89	171,578.02
War excess profits.....		330,047.73	330,047.73
Estate tax.....		72,435.15	72,435.15
Wine.....		109,788.25	109,788.25
Rectified spirits.....		1,353.61	1,353.61
Special taxes, Sept. 8, 1916.....		3,666.25	3,666.25
Documentary stamp, Sept. 8, 1916, and Oct. 3, 1917.....		24,045.13	24,045.13
War tax on admissions and dues, Oct. 3, 1917.....		39,847.25	39,847.25
War tax public utilities.....	67,764.49		67,764.49
War tax beverages, Oct. 3, 1917.....	1,069.28		1,069.28
War excise tax.....	7,153.18		7,153.18
Total.....	1,534,675.28	9,686,840.94	14,060,978.37

### UNITED STATES CLIMATOLOGICAL SERVICE.

All of the regular work of the Weather Bureau was successfully accomplished without interruption, and considerable progress was made on a number of new projects. The weekly, monthly, and annual publications of the Hawaii Section were maintained regularly as heretofore.

The cooperation of the bureau with the United States Navy, whereby Honolulu air pressure, temperature, state of the weather, direction and velocity of the wind are sent broadcast via wireless four times daily, has been maintained without lapse.

Daily weather reports were cabled to Honolulu throughout the year from Midway Island and were received in tabulated form as monthly reports by mail from April, May, and June from Fanning Island. One hundred and fifty cooperative stations were maintained throughout the year in the Hawaiian Islands, all of which recorded daily rainfall and many of which recorded the maximum and minimum temperature, prevailing direction of the wind, character of the daily weather, and miscellaneous phenomena in addition to rainfall.

The distribution of the 150 substations of the section follows: Hawaii, 47; Kauai, 27; Lanai, 1; Maui, 33; Molokai, 2; Oahu, 40. Forty of these observers at the substations, in addition to their faithfully performed duties in rendering their regular monthly reports, send in weekly card reports on weather and crop conditions for publication in the weekly bulletin issued from the Honolulu office of the Weather Bureau. These are distributed as follows: Hawaii, 20; Kauai, 6; Maui, 4; Oahu, 10.

Wind velocity records were maintained throughout the year at Haiku Experiment Station, near Haiku, Maui; Hawi Mill, Hawi, Hawaii, and at the weather bureau office, Honolulu. Wind velocity

studies in connection with these records, in addition to consideration of the prevailing winds over the islands, should prove to be valuable adjuncts in determining the relation of wind to vegetation.

The revised form of the Weekly Weather and Crop Report was continued throughout the year and proved to be quite satisfactory for the use intended. A distinct change in the form of the monthly bulletin, known as Climatological Data, was introduced in the May, 1918, issue, which is thought to add materially to the usefulness of the publication—especially for comparison purposes with like months for the past years.

Attention is invited to the text or opening page of the May issue of the report mentioned, and to the “sums and means” by islands appearing in the bodies of the tables.

Twice daily water temperature readings were made at Waikiki Beach, Honolulu, during most of the year. The thermometers were supplied by the Weather Bureau, while employees of the Moana Hotel made the readings at the end of the long pier extending out from near the bathhouse. These readings should prove interesting to all tourists and residents.

A word of appreciation is due to all those who cooperated in the valuable climatological work at the 150 substations, as well as those who participated in the special cooperative work, representing the United States Magnetic Survey, the Naval Radio Station, Pearl Harbor, the Kilauea Volcano Observatory, and the United States Agricultural Experiment Stations near Haiku, Maui, and at Glenwood, Hawaii.

Very truly, yours,

C. J. McCARTHY,  
*Governor of Hawaii.*

## APPENDIX.

### TERRITORIAL REGISTER AND DIRECTORY.

#### TERRITORIAL OFFICIALS.

##### EXECUTIVE.

C. J. McCarthy, governor.  
C. P. Iaukea, secretary.  
Arthur G. Smith,<sup>1</sup> attorney general.  
Delbert E. Metzger, treasurer.  
B. G. Rivenburgh, commissioner of public lands.  
Lyman H. Bigelow, superintendent of public works.

H. W. Kinney, superintendent of public instruction.  
M. G. K. Hopkins, auditor.  
W. E. Wall, surveyor.  
W. P. Jarrett, high sheriff.  
John F. Stone, private secretary to governor.

##### DELEGATE TO CONGRESS.

J. K. Kalaniana'ole.

##### JUDICIAL.

J. L. Coke, chief justice supreme court.  
R. P. Quarles, associate justice supreme court.  
S. B. Kemp, associate justice supreme court.  
C. W. Ashford, first judge, first circuit.  
W. S. Edings, second judge, first circuit.  
W. H. Heen, third judge, first circuit.

L. L. Burr, judge second circuit, Wailuku, Maui.  
J. W. Thompson, judge third circuit, Kailua, Hawaii.  
C. K. Quinn, judge fourth circuit, Hilo, Hawaii.  
L. A. Dickey, judge fifth circuit, Lihue, Kauai.

##### LEGISLATIVE.

*Senate*.—C. F. Chillingworth (president), A. L. Castle, E. W. Quinn, S. P. Correa, R. W. Shingle, M. C. Pacheco, R. H. Makekau, S. L. Desha, Robert Hind, G. P. Kamauoha, H. A. Baldwin, W. T. Robinson, G. P. Cooke, J. H. Coney, M. A. Mikaele.

*House*.—H. L. Holstein (speaker), C. H. Cooke, L. Andrews, J. K. Jarrett, C. N. Marquez, T. H. Petrie, G. P. Wilder, R. Ahuna, E. K. Fernandez, Joseph Kalana, D. M. Kupihea, W. E. Miles, W. F. Mossman, H. L. Kawewehi, E. da Silva, N. K. Lyman, B. H. Kelekolio, J. Leal, E. K. Kaana, G. K. Kawaha, A. F. Tavares, E. Waiaholo, J. Brown, jr., L. L. Joseph, M. G. Paschoal, J. J. Walsh, J. K. Lota, J. K. Kula, C. H. Wilcox, J. de C. Jerves.

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*Hawaii*.—A. S. Le Baron Gurney, Benjamin Rose, Thomas E Cook.

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<sup>1</sup> Harry Irwin was appointed on August 31 to succeed Arthur G. Smith, resigned.

## COMMISSIONERS OF BOUNDARIES.

First and second judicial circuits, M. D. Monsarrat; third judicial circuit, J. A. Matthewman; fourth judicial circuit, W. H. Smith; fifth judicial circuit, L. A. Dickey.

## CIVIL SERVICE COMMISSION FOR THE CLASSIFIED SERVICE OF THE BOARD OF HEALTH.

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## FAIR COMMISSION.

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*Oahu*.—Ewa and Waianae: C. A. Brown, E. O. White; Waiāluā: W. B. Thomas, R. Kinney; Honolulu: J. Markham.

*Hawaii*.—South Kona: L. P. Lincoln, E. K. Kaaua, A. Halle; Kau: J. T. Nakai, G. J. Becker, George Campbell; North Kona: A. S. Wall, T. Silva, J. Kaelemakule; North Kohala: W. S. May, E. K. Kanehailoa, E. K. Akina; Puna: G. D. Supe, H. J. Lyman; Hamakua: W. J. Rickard, A. L. Moses, J. K. White.

*Mauī*.—Makawao: Edgar Morton, W. Henning, J. E. Pires; Molokai: H. R. Hitchcock, J. G. Munro, S. Fuller.

## FOOD COMMISSION.

J. D. Dole (chairman), F. E. Blake, C. G. Bockus, W. H. Hoogs, Akaike Akana, J. Waterhouse, Dr. W. D. Bah'wila, C. A. Rice.

## COMMISSION ON GAME AND FISHERIES.

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*Hawaii*.—G. J. Richardson.

*Kauai*.—C. A. Rice.

*Mauī*.—D. T. Fleming.

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*Kauai*.—E. E. Mahlum, H. H. Brodie, J. H. Moragne, J. M. Lydgate.

*Mau*.—W. J. Cooper, G. Freeland, W. A. McKay, G. Weight, W. H. Field.

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G. Herbert, L. J. Warren, C. B. Cooper.

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*Hawaii*.—T. C. White, R. T. Guard, J. A. M. Osorio, S. P. Woods, J. T. Moir.

*Mau*.—D. C. Lindsay, C. D. Lufkin, T. B. Lyons, D. H. Case, W. F. Kaae.

*Kauai*.—B. D. Baldwin, W. D. McBryde, G. N. Wilcox, W. H. Rice, sr., W. F. Sanborn.

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*Oahu*.—L. H. Bigelow (chairman ex officio), J. J. Fern (ex officio), A. D. Castro, E. G. Dulsenberg, Lester Petrie.

*Hawaii*.—L. H. Bigelow (chairman ex officio), P. W. P. Bluett, F. R. Greenwell, O. L. Sorenson, H. B. Mariner, A. C. Wheeler.

*Mau*.—L. H. Bigelow (chairman ex officio), P. Cockett, R. A. Wadsworth, W. F. Pogue.

*Kauai*.—L. H. Bigelow (chairman ex officio), H. D. Wishard, A. Menefoglio, F. Gay, W. D. McBryde.

## DISTRICT MAGISTRATES.

*Oahu*.—Honolulu: J. B. Lightfoot, A. D. Larnach; Ewa: S. Hookano; Koolauloa: J. L. Pao; Waialua: E. Hore, W. S. Wond; Koolaupoko: J. K. Paele, H. C. Adams; Waianae: B. P. Zablan.

*Hawaii*.—South Kona: R. Makahalupa; South Hilo: T. E. M. Osorio, W. H. Smith; North Kohala: R. H. Atkins; North Kona: D. K. Baker; Puna: J. S. Ferry, S. H. Haaheo; Kau: W. H. Hayselden; South Kohala: T. N. Nalellehua; North Hilo: E. K. Simmons; Hamakua: Henry Hall, M. S. Botelho.

*Kauai*.—Lihue: J. L. Hjorth, J. H. Kaiwi; Waimea: C. B. Hofgaard, J. K. Kapuniai; Kawaihau: R. Puuki; Hanalei: W. Huddy; Koloa: S. K. Kaulili.

*Mau*.—Makawao: J. G. Anjo, G. K. Kunukan; Hana: H. E. Palakiko, G. P. Kaimakaole; Lahaina: C. B. Cockett; Wailuku: W. A. McKay, H. O. Mossman; Molokai: O. C. Conradt; Kalawao: J. D. McVeigh.

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*First judicial circuit.*—J. W. Waldron, E. H. Wodehouse, J. M. Dowsett.

*Second judicial circuit.*—G. Freeland, W. Henning.

*Third judicial circuit.*—L. S. Aungst, S. P. Woods, J. Monsarrat.

*Fourth judicial circuit.*—G. Cool, William Weight, C. E. Wright.

*Fifth judicial circuit.*—J. M. Lydgate, A. S. Wilcox, H. Wolters.

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Hawaii, J. Henderson; Oahu, A. H. Ford; Maui, W. O. Aiken; Kauai, W. H. Rice.

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*Maui.*—D. C. Lindsay.

*Kauai.*—E. A. Knudsen.

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*Second representative district.*—W. P. McDougall, A. G. Patten, W. H. Lainaholo.

*Third representative district.*—T. Clark, W. E. Bal, jr., J. Ferreira.

*Fourth and fifth representative districts.*—S. F. Chillingworth (chairman), A. V. Gear, W. W. Buckle.

*Sixth representative district.*—J. Hjorth (chairman), W. Kalawe, J. H. K. Kaiwi.

## TAX-APPEAL COURTS.

*First judicial circuit.*—J. Milton, J. H. Fisher, R. B. Booth.  
*Second judicial circuit.*—J. N. K. Keola, C. D. Lufkin, George Weight.  
*Third judicial circuit.*—W. P. McDougall, G. P. Tulloch, Arthur Stillman.  
*Fourth judicial circuit.*—R. A. Lucas, W. J. Stone, C. M. Hudson.  
*Fifth judicial circuit.*—A. Horner, E. M. Cheatham, J. H. Moragne.

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Dr. V. A. Norgaard, J. C. Fitzgerald, Dr. W. T. Monsarrat.

## WAIKIKI SANITATION, RECLAMATION, AND IMPROVEMENT COMMISSION.

L. H. Bigelow, A. S. Cantin, B. G. Rivenburgh, A. A. Young, Col. G. S. Bingham.

## FEDERAL OFFICIALS.

## POST OFFICE DEPARTMENT.

Inspector, F. W. Valle; postmaster, D. H. MacAdam; assistant postmaster, W. C. Petersen.

## TREASURY DEPARTMENT.

*Customs division.*—Collector, M. A. Franklin; special deputy collector, R. Sharp.

*Internal-Revenue Service.*—Collector, H. Hathaway; chief deputy collector, W. G. Ashley, jr.

*Public Health Service.*—Surg. F. E. Trotter; leprosy investigation, Surg. H. T. Hollmann.

## DEPARTMENT OF AGRICULTURE.

*Hawaii Experiment Station.*—Agronomist in charge, J. M. Westgate.

*Weather Bureau.*—Meteorologist in charge, L. H. Daingerfield.

## DEPARTMENT OF LABOR.

*Immigration Service.*—Inspector in charge, R. L. Halsey.

## DEPARTMENT OF COMMERCE.

*Lighthouse Service.*—Superintendent of lighthouses, nineteenth lighthouse district, A. E. Arledge.

## GEOLOGICAL SURVEY.

C. T. Bailey, district engineer in charge Hawaii district.

## DEPARTMENT OF JUSTICE.

*United States district court.*—J. B. Poindexter, H. W. Vaughan, judges; S. C. Huber, district attorney; J. J. Banks, assistant district attorney; J. J. Smiddy, marshal; A. E. Harris, clerk.

## WAR DEPARTMENT.

## HAWAIIAN DEPARTMENT.

Brig. Gen. Augustus P. Blocksom, United States Army, commanding.

*Aides-de-camp.*—First Lieut. Chauncey F. Cleveland, Infantry; First Lieut. Philp, L. Rice, Infantry.

*Department Staff.*—Col. Henry C. Merriam, chief of staff; Maj. Charles W. C. Deering, department adjutant; Col. Charles G. Woodward, department inspector; Maj. Ingram M. Stainback, department judge advocate; Col. Gonzalez S. Bingham, department quartermaster; Col. Rudolph G. Ebert, department sur-



geon; Lieut. Col. Robert R. Raymond, department engineer; Lieut. Col. Charles G. Mettler, department ordnance officer; Capt. William T. Peyton, acting department signal officer; Maj. Richard S. Bryan, department sanitary inspector; Maj. James D. Dougherty, officer in charge of militia affairs.

*Additional staff.*—Maj. Walter L. Reesman, Dental Corps, dental surgeon; Maj. Charles B. Cooper, medical adviser to Governor of Hawaii; Capt. Lloyd E. Case, department veterinarian; Capt. Frank P. Baldwin, attending surgeon; Capt. Nelson H. Duval, assistant to department engineer; Capt. Fred B. Buckley, assistant to department quartermaster; Capt. Harry E. Murray, inspector of motor-driven vehicles; Capt. Richard Bolton, assistant to department quartermaster; Capt. Herbert E. Wescott, department reclamation officer; Capt. William A. MacNicholl, assistant to department quartermaster; Capt. Archie W. Brown, in charge of war-risk-insurance office and assistant to department adjutant; Capt. Harry G. Field, in charge of selective-draft work; Capt. William G. Allen, assistant to constructing quartermaster; First Lieut. Cyril F. Damon, assistant to chief of staff; First Lieut. Edgar Anderson, assistant to department insurance officer.

*Attached.*—Lieut. Col. George J. Oden, department casual officer, inspector of small-arms practice; Capt. John A. Baird, assistant to chief of staff; Capt. Philip Spalding, assistant to chief of staff; First Lieut. A. S. Hayward, assistant to chief of staff.

*First Hawaiian Brigade.*—Col. Earl C. Carnahan, Twenty-fifth Infantry, commanding.

*Department Hospital.*—Col. William P. Kendall, Medical Corps, commanding.

*Coast Defenses of Oahu.*—Maj. William W. Hicks, C. A. C., N. A., commanding.

*Fort Shafter, H. T.*—Col. William C. Bennett, Second Infantry, commanding.

*Schofield Barracks, H. T.*—Col. John W. Heard, Fourth Cavalry, commanding.

#### NAVAL STATION.

(Owing to censorship restrictions no roster of officers at the naval station, Pearl Harbor, is available.)

#### NATIONAL GUARD OF HAWAII.

Gov. C. J. McCarthy, commander in chief.

Col. Will Wayne, the adjutant general.





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